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"Quantam ego quidem video motus morborum fere omnes a motibus in systemate nervorum ita pendent ut morbi fere omnes quodammodo Nervosi dici queant."—CULLEN'S NOSOLOGY: BOOK II. P. 181—EDINBURG ED., 1780.

THE
Alienist and Neurologist

A JOURNAL OF
Scientific, Clinical and Forensic
*NEUROLOGY AND PSYCHOLOGY,
PSYCHIATRY AND NEURIATRY.*

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General Practitioner of Medicine.

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MY CONCEPTION OF
HYSTERIA AND HYPNOTISM (PITHIATISM).

A LECTURE DELIVERED BEFORE THE SOCIETY OF
INTERNS OF THE HOSPITALS OF PARIS.

(JUNE 28, 1906)

BY J. BABINSKI, PARIS*.

GENTLEMEN:—As the title of this lecture indicates, my conception of hysteria and hypnotism differs from the classic doctrine. Though my ideas on this subject are known to the majority of neurologists, and accepted by some of them, notably by Dutil and Laubry, authors of the article "Hysteria" published in the second edition of the *Traité de Médecine de Charcot-Bouchard-Brissaud*, they are not generally familiar to physicians who have not given special attention to the subject of nervous diseases. With the view to aid in the propagation of my ideas, my friend, Dr. Vaquez, your President, has invited me to bring them before you; and before beginning, I wish to express to him my sincere thanks.

Of old, physicians believed that they had observed a group of nervous manifestations intimately related to dis-

*Translated by Charles Gilbert Chaddock, M. D., Professor of Diseases of the Nervous System, St. Louis University, St. Louis.

turbance of the functions of the sexual system of women arising either from sexual excesses or from excessive continence. In order to emphasize this characteristic, they called this nosological group "hysteria," from *ὑστέρα*, uterus; and certainly, if the relation indicated were actual, the neurosis with which we are concerned would be thus perfectly defined and named in a most expressive manner. But more exact observation of facts later led to the recognition of the various troubles called hysterical in women perfectly balanced sexually, and therefore the primitive definition was seen to be inexact. Nevertheless, the term "*hysteria*" was preserved because this affection seemed at least to be an appanage of the female sex. Finally my illustrious master, Charcot, proved the falsity of the conception handed down by his predecessors by showing that the neuropathic phenomena in question were frequent in men, in children before puberty, and even in the aged after the extinction of sexual life.

With this demonstration it would have been logical to eliminate from the medical vocabulary a term calculated to cause confusion, but the habit had been engendered, and in spite of former errors of interpretation it was nevertheless well established that the nervous disturbances called hysterical had a distinctive *cachet*, and that they should be placed in a special class in which the name might be retained, provided it were understood that the word had lost its etymological meaning.

If it be not absolutely necessary to suppress the word "hysteria," we still must give it a new definition for the reason that we are obliged to give up the primitive definition founded upon an erroneous idea.

But, on reading works on this neurosis, one is immediately impressed by the embarrassment of the authors in this respect. That eminent physician, Lasègue, seeing the imperfection of the definitions that had been proposed and doubtless believing himself incapable of giving a satisfactory one, declared that "the definition of hysteria has never been given and never will be." I am surprised that a man of such distinction, so fine an observer, and a

master who, before taking up the study of biology, had taught philosophy, should have committed such an error in logic. To say that words which we pretend to preserve cannot be defined, is to say that words come before ideas. What would you say of a naturalist who would confess himself incapable of giving a definition of a zoological species, the reality of which he admitted? Let us reflect a moment. Only when we think we have discovered an object which is distinguished by some characteristic from other objects already known, do we think of giving it a new name, and we define it by a word which consists simply in the enunciation of attributes which seem to belong to this object alone. If hysteria cannot be defined, then it necessarily becomes confounded with other neuroses, and it should be erased from nosology. If, on the contrary, it be considered that hysteria has special attributes, it can be and should be defined. This is the alternative to which one is necessarily led; and I think no neurologist would hesitate to choose the second of the two propositions.

Moreover, the majority of physicians that have written on hysteria have not contested the possibility of a definition, but they have not thought themselves capable of making a precise one.

Hysteria, according to the general opinion, owes its *cachet* to a particular combination of symptoms of which no single one is absolutely characteristic, and it is only possible to define it by describing these succinctly and by showing how the elements which compose it are united with one another.

It is generally asserted that hysteria manifests itself in two orders of symptoms, some permanent, the stigmata, the others transitory. The stigmata, to which great importance is attached, are said to have, aside from their fixity, the peculiarity of developing usually without the patient's knowledge: like the anesthesia of the throat; the sensori-sensorial hemianesthesia, which when well-developed consists of abolition of the various modes of general sensibility and unilateral diminution of the acuteness

of the special senses, especially that of vision with concentric narrowing of the visual field, diplopia, or monocular polyopia and a form of dyschromatopsia which, in contrast with that observed in tabes and alcoholism, affects blue and violet while the perception of red remains normal. Among other stigmata we may mention the various painful points like the *clou hysterique* of the head and the ovarian hyperesthesia. The attacks, the paralyses, contractures, aphonia, mutism, etc., are the transitory manifestations, usually appearing suddenly under the influence of emotions, disappearing after having lasted some time, suddenly or rapidly, possibly taking the place of each other, and usually exercising no notable effect upon the general state.

This is the classic conception of hysteria—the way in which it has been defined. The result is that when a disturbance is observed in a patient presenting one of the characteristics attributed to transitory hysterical manifestations, we hasten to look for the stigmata; if these are found, there is no longer any hesitation—the trouble is hysterical. Many physicians are not even so exacting; when a symptom seems to them to be difficult of interpretation and it cannot, in their opinion, be placed in any other nosological group, it suffices for them to call it hysterical, if the patient in whom it is observed presents the stigmata of the neurosis.

Proceeding in this manner, there has been a tendency to class in the term "*hysteria*" the most varied phenomena. You will have an idea of the extent of the domain that is given to this neurosis when I shall have mentioned the various disturbances that are attributed to it. I give you a succinct enumeration.

In the first place there are, without counting the attacks and anesthasias which have been mentioned, the paralyses which may assume almost any aspect, reproduce the traits of hemiplegia and cerebral monoplegias and spinal paraplegias, and even those of neural paralyses, thus presenting the characteristics of peripheral paralyses—

for example, those of radial paralyses, or those of the third or the sixth pair. Hysterical neuralgias have also been described, especially of the sciatic nerve.

Hysteria is also thought to be capable of causing mental troubles which sometimes become extremely grave and make what has been called hysterical insanity, described in detail in the treatise on mental diseases, so justly appreciated, by Morel.

The visual apparatus is thought to pay an excessive tribute to hysteria; besides diminution of visual acuteness, narrowing of the visual field, and ocular palsies already mentioned, it is said that sometimes fixed pupils are seen during the attacks and found outside of the attacks, and that hysteria is capable of causing inequality of pupils and mydriasis with abolition of reflexes.

Cutaneous and vasomotor disturbances are also said to be frequently engendered by the neurosis in question, if classic reports are accepted; it is said to cause erythemas, hemorrhages, phlyctenæ, bullæ, ulcerations, and even gangrene; numerous observations of hysterical edema, especially blue edema, have been published.

In relation to the respiratory apparatus, there have been described aphonia, spasm of the glottis, edema of the glottis, pulmonary congestion, and pulmonary hemorrhage.

In connection with the cardiac apparatus there have been reported instances of angina pectoris, tachycardia, and brachycardia.

The gastric manifestations of hysteria are said to be gastralgia, vomiting, and hematemesis.

Polyuria, anuria, hematuria, albuminuria, incontinence, and retention of urine, are also said to be possible manifestations of this neurosis.

Finally hysterical fever was described long ago, and recently cases have been reported which are considered indisputable.

You see that this is a long list which, moreover, is not absolutely complete; and that, according to the definition generally accepted, hysteria may manifest itself in

almost any way. Charcot said that hysteria was the "great simulator." The truth of this proposition has been overvalued, and it has since been altered to mean that "hysteria can do anything;" and, moreover, this idea, which many physicians freely express, appears to them to conform to their rather cloudy conception of hysteria, according to which this neurosis is thought to be caused by an unknown *something* capable of affecting the various parts of the nervous system and thus of producing disorders which vary with the seat of the trouble.

Gentlemen, I shall now criticise the ideas which I have just presented.

Let us consider first the stigmata which, according to the classic doctrine, are of fundamental importance. Their fixity is regarded as one of their essential characteristics. I think I have a right to deny this assertion; for many years, every time I have seen a patient afflicted with hemianesthesia or concentric narrowing of the visual field, I have tried to cause these disturbances to disappear; and I can say, that with very few exceptions—where I have had to do with hysteria of a professional kind, and where such conditions were a source of livelihood, simulators rather than patients—I have always succeeded in attaining my end. When in the presence of an hysterical patient presenting general or hemianesthesia, no matter how complete it may appear at first view, in whom the ordinary procedure consists of sticking needles through the skin to demonstrate abolition of pain, I proceed in the following manner: I suddenly apply to the end of the fingers, a region especially sensitive, two electrodes of a small faradic battery at full strength; nineteen times in twenty, I notice that the individual under examination makes a face showing pain, and the hand is drawn away. Of such subjects, some refuse to allow themselves to be touched again with electricity and seek the advice of another physician whose electric apparatus needs repair; others, and they constitute the majority, acknowledge that they felt the stimulus; I then renew the experiment while telling them that my

procedure is an infallible cure for anesthesia, and, as I have said, I almost always succeed in a very short time, often on the first attempt. By analagous procedure I also obtain easily disappearance of concentric narrowing of the visual field, of dyschromatopsia, and of insensibility of the throat, which, it may be said in passing, is erroneously called "abolition of the pharyngeal reflex," for reflex excitability is never abolished in such cases.

The stigmata are said to develop without the patient's knowledge, and this is thought to be a second cardinal characteristic. I believe that these phenomena are the result of auto-suggestion or of the unconscious suggestion of the physician, as has already been sustained by Dr. Bernheim, of Nancy. In examining a patient, the questions that are ordinarily asked when the state of sensibility is under investigation, may suffice to awake in the mind of the subject the idea of hemianesthesia or of a visual disturbance; therefore, it is absolutely essential to take all precautions to avoid this source of error.

My manner of procedure in order to avoid as far as possible this cause of error is as follows: I never examine such patients before one another or speak before them to my students of symptoms that may be observed in hysteria; I use the same precaution even if the patient is in an *attack* and apparently unconscious; for I know very well that in like cases such seeming unconsciousness is not real, that we are dealing rather with a state of sub-consciousness, and that what is said before such a patient may be perfectly registered by the patient's intellect. Before examining the sensibility, I tell the patient to indicate when he perceives a sensation of contact, prick, or other impression; then, after having the patient close the eyes, I apply on various parts of the skin, now on the right side, now on the left, a hair pencil, the point of a pin, and cold and warm objects; then I make passive movements of the lower and upper limbs, and finally, I cause the patient to handle objects having various forms. If I do not obtain an immediate reply I say: "What do you

feel?"—"What did I just do?", but I never ask the question "Did you feel what I did?" or "Do you feel as well on one side as on the other?", for this last manner of questioning may well be the point of departure of a suggestion. For many years I have adopted this method and I have not observed one single case of hemianesthesia in subjects who, before consulting me, had never been subjected to a neurological examination; and it goes without saying that I now speak only of patients presenting indisputable manifestations of hysteria, like the characteristic attacks. I may add that my experience in this direction is concerned with more than a hundred cases of both sexes.

Narrowing of the visual field, like hemianesthesia, does not develop spontaneously, that is, without the intervention of suggestion. You know, gentlemen, how we investigate for these symptoms: we use a perimeter, which I show you. The patient puts his chin upon the support opposite the center of the graduated arc; one eye is closed and with the other the patient is told to fix constantly the copper button in the middle of the arc; this done, we move from the middle to the periphery or from the periphery to the middle of the arc, an index carrying a piece of paper, and we employ successively pieces of paper of different colors. To begin with, the patient is told to indicate the moment when he fails to see the index or to indicate the moment he begins to see it. This manner of procedure is insufficient and defective; since normally, examined in this way, vision at the periphery is not as distinct as at the center, certain subjects, perfectly normal as far as vision is concerned, think, as I have often had occasion to prove to myself, that they should indicate what they see only at the moment of distinct perception, and thus they give indications apt to lead the observer into error; moreover, in this there is a source of suggestion and auto-suggestion. Therefore, we must be careful to say explicitly to the person under examination that he must indicate the fact the moment he

commences to distinguish the index, even before it is perfectly distinct. I am in the habit of holding, in the first place, the index at the periphery of the perimeter but behind it, so that it cannot be seen; and in order to be sure that the patient does not answer at haphazard I ask whether he sees it or not; then, after a time, leaving the index always at the periphery, I place it on the anterior surface of the perimeter and thus I advance it, placing it behind and before. In this way I have studied in collaboration with my friend, Dr. Chaillous, a large number of hysterical patients, and we have found that the visual field in them has been quite normal except in patients that had undergone examination by others. We have never observed in them either monocular polyopia or the dyschromatopsia that is thought to be special to this condition.

After what I have just said to you about hemianesthesia and visual disturbances, I shall not insist upon the other stigmata, like ovarian hyperesthesia; they, like the foregoing, are the product of suggestion, and the hysterical patients that I have in my service have no such symptoms.

Thus, gentlemen, the symptoms called stigmata are not permanent and they do not occur at intervals; they are wanting, at least in the great majority of cases, if the examination be conducted in the way which I have indicated; they have not, therefore, the fundamental importance that is attributed to them, and the classic conception, as well as the definition of hysteria based upon their existence, is shaken at its foundation.

I pass on to hysterical manifestations called transitory; I shall try to prove to you that among the characteristics mentioned, and which serve to define hysteria, there is not a single one which is worthy of being retained. The rôle of moral influence, of emotion, in the genesis of hysterical troubles cannot be denied, but these same influences are capable of causing nervous accidents in the diabetic, and even of causing grave circulatory disturbances in those having vascular lesions; therefore, these peculiarities are not distinctive of hysteria, and cannot be made a part of

the definition. The rapidity with which these disturbances disappear does not belong especially to hysterical phenomena; does not the pain of nephritic colic, does not a gastric crisis in the tabetic, often cease quickly? Like hysteria, gout may manifest itself in various symptoms which follow one another and are substituted one for another. Finally, hysteria is not the only disease which usually causes no particular disturbance of the general health; patients afflicted with insanity of doubt are in the same condition.

As you see, the classic definition does not stand criticism, either in detail or as a whole.

Before proceeding, I think I should recall certain definitions, more theoretical than clinical, that have been proposed.

According to Moebius we may range in hysteria all the bodily manifestations provoked by mental representations. In this we have no elements of a definition; for this characteristic is not applicable to all the manifestations of hysteria, and it may be applied to disturbances which are incontestably foreign to hysteria. An hysterical hallucination is not a corporeal disturbance, and, moreover, certain forms of alienation are accompanied by corporeal disturbances which are not due to idea.

P. Janet says: "Hysteria is a psychosis which belongs to a group of mental diseases due to cerebral insufficiency; it is especially characterized by moral symptoms; the principal thing is weakening of the faculty of psychological synthesis." While admitting that these features are characteristic of hysteria, a point open to discussion, it is evident that they cannot serve as a means of defining it.

Thus we have met an obstacle across our path, and there is no reason for the moment to discuss the value of other hysterical manifestations admitted in the classic doctrine. Is there such a thing as hysterical fever or not? It is impossible, it would be absurd, to discuss this subject before having determined the meaning of the word "hysteria;" that is to say, before having defined it. That is what I propose to do for you, and I have only to recall

the definition *which I gave five years ago and which doubtless was based upon a solid foundation, since up to the present time no neurologist has contested its value.

What must we do to define hysteria? I have indicated it several times. We have only to determine and make clear the characteristics which belong to it alone. In order to do this, we must analyze the nervous manifestations like grand attacks, certain paralyses, certain contractures, the sensori-sensorial hemianesthesia, which we have previously discussed and which physicians are unanimous in considering to be hysterical; then these must be compared with nervous disturbances which all consider to be foreign to hysteria, and thus bring out the distinctive characteristics of this neurosis.

This manner of regarding the matter has led me to the conclusion that hysterical manifestations possess two attributes—on the one hand, the possibility of being reproduced by suggestion with rigid exactness in certain individuals, and on the other hand, that they can be caused to disappear by the exclusive influence of persuasion.

Before attempting to prove to you the correctness of my opinion, it would be well to recall also the precise sense which I think should be attached to the two words "suggestion" and "persuasion." The word "suggestion" in every-day language means "bad insinuation." (*Dictionnaire de la langue française de Littré.*) In the medical sense this word seems to me should express the act by which one tries to cause another to accept or to realize an idea manifestly irrational. For example, when we say to a person, when the weather is clear and dry, that the sky is covered with clouds and that it is raining, we make a suggestion, for this statement is in flagrant discord with facts; to tell a person whose muscles act normally that he is hemiplegic or paraplegic, is also suggestion, for this statement is in contradiction with good sense. If such affirmations are accepted, if the visual hallucination, or the paralysis is realized, it may be said that the patient experi-

**Vide*—Definition de l'hystérie, par J. Babinski. (*Société neurologie*, 7 November, 1901).

mented upon has been influenced by suggestion. On the contrary, if we say to a patient affected by a psychic paralysis, that it is a trouble which is certain to be cured by an effort of the will, with the aid of electricity or any other treatment, this is not suggestion, for the idea expressed is reasonable and in any event does not shock reason; this is persuasion.

Let us resume our argument. The disturbances which are incontestably hysterical, mentioned previously—attacks, hemianesthesia, etc.,—can be reproduced by means of suggestion in certain subjects, and their reproduction is so faithful that it is impossible to distinguish the copy from the model. It seems to me useless to insist upon this point, for I shall certainly not be controverted in this respect by anyone. However, not a single affection known to-day, outside of hysteria, can be reproduced exactly by suggestion; the most that can be accomplished in this sense by this means is a very imperfect imitation easy to distinguish from the original; for example, I defy anyone to reproduce exactly in a patient, no matter how open to suggestion, no matter how amenable to hypnotism, the elements of peripheral facial paralysis, of radial paralysis, of paralysis of the third pair, of organic hemiplegia, or of organic paraplegia. It is also impossible to obtain a faithful reproduction of other neuroses. To be sure it is possible to produce by suggestion a phobia, an obsession, a headache in the form of a *casque*, etc., and it would be possible also to create neuropathic states which might be taken by superficial observers for the insanity of doubt or for neurasthenia; but a physician versed in these affections could not be deceived; for him it would be sufficient to question carefully such patients or to have them under observation for a time in order to avoid any confusion.

In the same way that all the grand accidents of hysteria may be reproduced by suggestion, all may be caused to disappear under the exclusive influence of persuasion; and there is not a single one of these accidents which has not been seen to disappear in a few moments after the

hope of cure had been given to the patient.* No other disease acts in this way; and if one is not experienced in this method of treatment, one is surprised with the disappointment one meets when an attempt is made to cure by persuasion certain patients on whom *a priori* such means would seem to be efficacious. For example, take a patient suffering with the insanity of doubt, and bothered and tormented by various phobias. The case is that of an intelligent man in no wise delirious, perfectly aware of the absurdity of the thoughts which annoy him, knowing that his fears will not be realized, and actuated by a strong desire to be rid of the trouble which renders his life intolerable; let us admit too, that this patient can be hypnotized. It would seem that a case of this kind, presenting the above conditions, could be cured under the influence of persuasion; however, observation shows that this preconceived idea is erroneous; persuasion is capable of calming the patient, is useful to him, but it cannot cure him. Let us say that we have to do with a neurasthenic, alarmed about brain weakness, tormented with dark thoughts and hypochondriacal ideas which he cannot overcome; he sees himself threatened with insanity, and this obsession, a true labor of the mind, aggravates the neurasthenic manifestations. If we succeed in persuading the patient that his fears are unfounded, that he must necessarily get well, his mind is given a rest which is absolutely necessary to him and thus his return to a normal condition is hastened. In reality psychotherapy has been of service in such a case; it has prevented an increase of neurasthenia, but it is not the only agent in the cure; other means were needed, especially brain rest, more or less prolonged.

The foregoing is applicable to the accidents which I call *primary*, and which are by far the most important,—the anesthesias, the paralyses, the contractures, the crises, the mutism, etc., which may appear without having been

**Vide*, Hypnotisme et Hystérie, Du rôle de l'hypnotisme en thérapeutique, Leçon faite à la Salpêtrière par J. Babinski, et publiée, en 1891, dans la *Gazette hebdomadaire*.

preceded by other manifestations of hysteria. I think it would also be legitimate to call hysterical, the troubles which, without presenting the characteristics of *primary* accidents, are related closely to one or more of these accidents and to which they are subordinate; but under such circumstances, it is necessary to call them *secondary*. Muscular atrophy in hysteria * can be called a type of this kind; it never appears primarily, suggestion cannot cause it to appear, it is related to paralysis or to hysterical contracture which it never precedes and of which it is a consequence, and it rapidly disappears when the muscular function has been restored; this atrophy, therefore, is related to hysteria. However, I confess that this view is open to discussion and that in such cases it might be maintained that the atrophy is only the result of the inactivity of the paralyzed muscles. This is my view of the nature of the atrophy in question, which my master, Charcot, and I were the first to describe. In any event, until we have more ample knowledge we may retain a group of *secondary* accidents in which should be placed all the disturbances incontestably related to *primary* hysterical phenomena and independent of all other pathologic states.

Perhaps you will say to me that I have thus far defined only hysterical accidents, and you asked me to define hysteria itself.

I might reply that it is a psychic state rendering the individual in it susceptible to suggestion and subject also to auto-suggestion; in fact, we have seen that certain disturbances, like hemianesthesia and narrowing of the visual field, are due to medical suggestion, and in cases where suggestion is not apparent, it is natural to admit that it exists even though we are not able to prove it; or that we have to do with a case of auto-suggestion. But perhaps you would be right in objecting that certain disturbances which are absolutely foreign to hysteria may also be the consequence of auto-suggestion; does not a kind of auto-

**Vide*, De l'atrophie musculaire dans les paralysies hystériques, par J. Babinski, (*Archives de neurologie*, 1886).

suggestion lead the nosomaniac to believe that he is afflicted with an incurable disease, or does it not cause the persecuted individual to imagine he is the object of a coalition against him? Evidently; but it is certain that the mental process in one case differs from that in the other; here is the proof: disturbances which the hysterical person suggests to himself may be, as I have just indicated, reproduced by suggestion and caused to disappear by persuasion; this is not true of the ideas formed in the brain of the nosomaniac or of that of the person who is persecuted. Nevertheless, there is a possible cause of misunderstanding which should be avoided. Note that to separate hysteria from its manifestations, is to make an abstraction, and that if we wish to remain in the domain of facts, on clinical ground, it is only hysterical manifestations which should be defined. For these reasons I alter slightly the text of the definition which I have previously given of hysteria.

Here is the definition which I submit:

Hysteria is a special psychic state manifesting itself principally in disturbances which may be called primary, and subsequently in secondary disturbances.

The primary disturbances are distinguished by the fact that it is possible to reproduce them by suggestion in certain subjects with rigorous exactitude and to cause them to disappear under the exclusive influence of persuasion.

The secondary disturbances are distinguished by the fact that they are immediately subordinate to the primary disturbances.

I have already had occasion to say that up to the present time no neurologist has publicly come forward to oppose my ideas or to propose a new definition of hysterical manifestations. However, in private conversation some of my colleagues have offered certain objections which may also present themselves to the minds of some of you, and to which I think it well to reply. I shall pass them successively in review:

1. The distinction that I have made between suggestion, which causes the disturbances under consideration,

and persuasion, which cures them, has been criticised; it is not by a pure process of reasoning, it is said that hysterical manifestations are usually caused to disappear; usually the cure is effected through an emotion, by the confidence inspired by the physician, by belief in some mysterious power like the curative virtue of a pill or the occult influence of a sorcerer. I do not object, and, moreover, I have never maintained that the cure was always the direct result of a close process of reasoning; it is nevertheless true that, contrary to suggestion, the mental process which ends in a return to the normal state is reasonable, if not rational; or at least is not opposed to common sense. To have confidence in a physician who promises a cure is a most natural thing; to have faith in the word of a sorcerer affirming the infallible action of some secret remedy is in no sense absurd on the part of a mind without intellectual culture; the one who cures does so by persuasion. However, this is a question quite secondary from the point of view of defining hysteria.

2. Another objection has been expressed: There are cases of frank hysteria which are rebellious to persuasion and which continue eternally in spite of the efforts of physicians, or which disappear one fine day under the influence of an emotion after having resisted obstinately all means of psychotherapy. Therefore, I am told, you should not consider the possibility of cure by persuasion to be a specific characteristic of hysterical disturbances. Naturally, I do not pretend that we are always sure of curing hysterical manifestations by persuasion; I simply say that they are all *susceptible* of being cured by this means, and this suffices to justify my opinion. I think that a comparison will show you the correctness of this. Among organic affections of the brain in man, cerebral syphilis is the only one that can be completely cured by mercury, and I am sure that everybody will agree with me in declaring that this peculiarity is one which distinguishes cerebral syphilis from other organic brain diseases; but no one is ignorant of the fact that in many cases mercurial

treatment, no matter how thoroughly employed, does not prevent the evolution of this disease.

3. It has also been objected that psychotherapy is not efficacious in hysteria alone, and that consequently the curability by persuasion does not constitute a distinctive characteristic. I have already replied to this objection, but in order that there may be no lack of clearness, it may be well to make some additional remarks upon this point. I repeat, in the first place, that I do not contest the utility of psychotherapy outside of hysteria; I maintain merely that hysterical accidents are the only ones that can be made to disappear under this influence alone, that is, without the help of any other agent. If you wish to convince yourself on this point, have a personal idea founded upon experience, be careful to choose as objects of your study, cases which are plain from the point of view of diagnosis and avoid systematically cases that are in any way obscure. In the domain of the neuroses that manifest themselves almost exclusively in subjective symptoms, we are more prone to err than in cases of any other kind, and it is necessary to be very circumspect in the interpretation of facts; suggestion, for example, may induce certain transitory phobias which persuasion may later overcome, but in such instances, properly speaking, we have not to do with the insanity of doubt. If you wish to be convinced concerning the action of psychotherapy in this affection, take a typical subject in whom the disease dates back to infancy, which manifested itself from the beginning in scruples and manias, and which, while presenting periods of improvement and the opposite, has never quite disappeared but has caused disturbances like arhythmomania, mysophobia, (*délire du toucher*), the need to spend hours in washing, etc., and try to cure such a patient by persuasion. No doubt you can help him correct some of his complaints, and your result will seem to be notable if happily your treatment coincides with the beginning of a period of calm in the disease; but even if you have to do with the most favorable kind of a

case, you will note that your influence is singularly limited. In order to appreciate the rôle of psychotherapy in neurasthenia, take a case of frank neurasthenia of the form that is called constitutional; here also you will not be long in recognising that your power is very limited, and not to be compared with that which you have in certain cases of hysteria, in which in a few moments you cure completely accidents that have existed for several years.

4. Still another objection has been urged: "Why do you thus limit the domain of hysteria?" I reply that classifications cannot be arbitrarily made; that my delimitation is not the result of a caprice; that it is necessary in order to avoid confusion, to separate from each other disturbances which have not the same characteristics.

Having a precise definition, we are in a position now to make a useful review of the numerous disturbances attributed to hysteria, which have been previously mentioned, and we shall be able to determine whether they really make a part of hysteria.

Hysteria is capable of causing nervous crises of various forms; paralyzes that affect one member, the segment of a member, one side of the body, or the two lower extremities, and these paralyzes may be at one time limp at other times spastic. Hysteria may cause general anesthesia over the body or anesthesia limited to one side, to one member, to the segment of a member; hyperesthesias; narrowing of the visual field, diminution of acuteness of vision, blindness, aphonia, mutism, vomiting, retention of urine, and apparent involuntary emission of urine. All this is absolutely true, for we see patients in whom it is sometimes possible to cause to disappear in a few moments, simply by persuasion, phenomena of this kind; and of course we are able to reproduce by suggestion in certain subjects phenomena identical with these. But should we conclude from this that all the forms of nervous attacks, paralyzes, anesthetics, hyperasthetics, aphonia, and incontinence of urine, may be caused by hysteria? Most

assuredly not, for they do not possess all the distinctive characteristics of hysterical manifestations.*

It is impossible to reproduce by suggestion nervous crises accompanied by *lividity* of the lips with induction of minute cutaneous ecchymoses. Such nervous attacks cannot then be hysterical.

I have maintained for a long time that organic hemiplegia due to cerebral lesion, and paraplegia due to spinal lesion, manifest certain signs which are always wanting in hemiplegia and paraplegia purely hysterical in nature. Time does not allow me to discuss this question in detail, and† I shall content myself with calling your attention to one of the signs which I consider absolutely distinctive; that is, exaggeration of the tendon reflexes and perfect ankle-clonus‡ which is only a form of this exaggeration. My ideas on this subject are already admitted in large part by certain neurologists. In order to convince yourself, it is only necessary to look over the Bulletins of the Neurological Society of Paris, where this question has been several times discussed; however there are still many physicians who consider it to be an incontestable fact that exaggeration of the tendon-reflexes may occur in hysteria, a belief which depends, no doubt, upon the fact that they have not sufficiently examined the tendon-reflexes in normal individuals, and therefore they often regard as pathological a state which is physiological. If exaggeration of the tendon-reflexes and perfect ankle-clonus were primitive hysterical manifestations, it should be possible to reproduce them by suggestion with rigorous exactness in

**Vide*, "Introduction a la séméiologie des maladies du système nerveux Des symptômes objectifs que la volonté est incapable de reproduire. De leur importance en médecine legale." (*Gazette des hopitaux*, 11 Oct., 1904).

This article appeared in English under the title: Semeiology of the Nervous System etc., in Vol. XII., No. 2, 1905, of the *Interstate Medical Journal*.

†*Vide*, Diagnostic différentiel de l'hémiplégie hystérique, Leçon Clinique (*Gazette des hopitaux*, 5 et 8 Mai, 1900).

This lecture appeared under the title: Differential Diagnosis of Organic Hemiplegia and Hysterical Hemiplegia, *Interstate Medical Journal*, Vol. XII., No. 8, 1905.

‡*Vide*, De l'épilepsie spinale fruste, par J. Babinski (*Société de Neurologie de Paris*, 1 Mars. 1906).

certain subjects and to cause them to disappear by the influence of persuasion alone; but this cannot be done. For my part, I have tried in vain on many subjects very open to suggestion and easily hypnotized, and as far as I know no one else has ever yet succeeded in this attempt. On the other hand, in order to show that these phenomena should be classed in the secondary hysterical manifestations, it is necessary to show that they are symptoms closely subordinate to primary hysterical accidents. For example, let some one show me a patient afflicted with hysterical hemiplegia and with tendon-reflexes manifestly exaggerated in the arm and leg and perfect ankle-clonus on the paralyzed side, and let this hemiplegia be cured by suggestion and the patient examined again shortly after, and found devoid of ankle-clonus, and with equal reflexes on both sides—then the proof will have been given. I hasten to add that this proof, which I have asked now for six years from those of my colleagues who conserve the old view, has never been brought forward.

You see then that hysteria cannot do everything; it cannot possibly reproduce one of the essential characteristics of paralysis due to a lesion of the pyramidal tract.

For the same reason, I maintain hysteria never causes paralysis limited to the territory of a peripheral nerve. The observations on which the opposite statements are based are far from being conclusive. For example, cases of paralysis of the third pair have been published and called hysterical because the patient was afflicted with hysteria and the paralysis, after having lasted for a time, disappeared rapidly; such statements are without value; in fact, do we not know that in the pre-ataxic stage of tabes ocular paralysees often occur having exactly this characteristic of disappearing rapidly? And besides, there is no reason why we should not admit that such patients, while being afflicted with organic peripheral paralysis, are hysterical, for the association of hysteria and organic disease is a very common thing.

If *simple* muscular atrophy without reaction of degenera-

tion may be due to hysteria as a secondary manifestation, this is not true of degenerative muscular atrophy, which is absolutely foreign to this neurosis.

I shall not take the time to discuss the question of hysterical insanity; in my opinion this kind of insanity does not exist; moreover, to-day alienists are almost agreed in classifying as dementia præcox the majority of the manifestations which were formerly classified as hysterical insanity. Persuasion has no influence upon disturbances of this kind, and they cannot be reproduced by suggestion.

It is stated that hysteria often causes complete anesthesia of the cornea and the conjunctiva; this is another point which I contest. Try to abolish by suggestion sensibility of the eye in such a way as to imitate an anesthesia due to cocaine, or that which follows section of the fifth nerve, with abolition of the palpebral reflex; I declare that it cannot be done.

Hyperesthesias are common in hysteria, but they are never rigorously confined to the territory of a peripheral nerve. In reality hysteria is not capable of affecting a sensory or motor nerve as such, and the term "neuralgia," which is employed to designate certain pains due to hysteria, is not properly employed; it is impossible to cause to appear as the result of suggestion certain objective symptoms like, for example, the abolition of a tendon-reflex, which is so often seen in neuralgias due to neuritis; never in cases of hysterical sciatica is the ankle-jerk disturbed, and besides, a sciatica accompanied by abolition of this reflex has never been cured by persuasion alone.

I affirm that it is impossible to induce by suggestion abolition of pupillary reflexes or inequality of the pupils; that it is equally impossible to cure such conditions by persuasion, and that they are never seen, contrary to what is maintained by many authors, during the hysterical attack. My opinion is based upon hundreds of facts studied with great care, without prejudice, and I maintain with entire conviction that the notion of hysterical mydriases depends upon errors of observation or interpretation.

I also maintain that the reality of cutaneous and vaso-motor disturbances attributed to hysteria is far from being demonstrated. As for myself, I have never seen a convincing instance of hysterical cutaneous hemorrhage, phlyctenæ, bullæ, ulceration, gangrene, or edema; and I believe that those who have reported cases of this kind have been led into error by simulators, or that they have attributed to hysteria that which belonged to some concomitant affection. I have tried to reproduce these cutaneous conditions by suggestion, something which, according to certain hypnotists, is very simple, but I have never been successful. In 1903 I reported to the Medical Society of the Hospitals, an experiment of this kind which I am about to relate. I had in my service at the Pitié Hospital, a grand hysteric, very open to suggestion, presenting the phenomena of "Grand Hypnotism." Having put her in an hypnotic sleep, I tried to suggest to her that she had a burn on the arm and that there would develop on the spot where she had been burned, redness and blisters. The conditions were the very best to have my suggestion accepted, for I had known this woman a long time and I could cause to appear in her all the classic manifestations of hysteria; I can say that I had an extraordinary power over her. I was careful to envelop the limb in a silicate dressing in order to cause the patient to believe that she had been the victim of an accident and also to prevent any attempt at conscious or unconscious deception; besides, for we cannot take too many precautions in such cases, I had the patient closely watched. Forty-eight hours afterwards, when the dressing was removed, on the limb which was the object of the experiment there was not the least raising of the epidermis nor the slightest redness. I ask physicians who entertain an opinion contrary to my own to bring forward new facts; if, with the rigorous precautions I have indicated, they are able to obtain in certain subjects, phlyctenæ, hemorrhages, or blue edema, I shall gladly change my opinion in this respect, and I shall be obliged to recognize that these

disturbances, thus presenting the attributes of primary hysterical manifestations, belong to hysteria; but I doubt very much that such proof can be given. Furthermore, I do not believe that these phenomena are destined to be classed as secondary hysterical accidents.

Hysteria may induce aphonia and disturbances of respiration which, however, are not accompanied by objective symptoms indicating disturbance of hematosis; but it cannot cause a true palsy of the vocal chords, edema of the glottis, or pulmonary congestion. My denial rests upon reasons which I have already given; the facts upon which statements to the contrary are based do not realize the required conditions.

I will say as much of visceral hemorrhages; nothing authorizes the admission that hemophthisis, hematemesis, or hematuria may be caused by hysteria; such cases are probably instances of association of hysteria and organic diseases badly interpreted, which have deceived certain physicians, whose observations have been accepted without sufficient control. I recall several patients who were long considered to be afflicted with hysterical hemophthisis or hysterical hematuria, in whom later appeared the characteristic signs of pulmonary or renal tuberculosis. It should be remarked also that the published cases of hysterical hemorrhage become more and more rare in proportion as methods of diagnosis have become more exact in relation to organic visceral affections.

Hysteria may provoke pains in the region of the heart, but it is not easy to confound these with angina pectoris. I have never seen a rapid or slow pulse that could be attributed to hysteria.

We sometimes observe in hysteria an emission of urine which seems to be independent of volition, but that is simply apparent, and true incontinence, in which the urine passes drop by drop, as it were by sweating, is not hysterical; in cases of this kind we never observe the distinctive marks which belong to primary or secondary hysterical manifestations.

So-called hysterical polyuria, of which I have myself published a case, seems to be simply an abundant emission of urine due to polydipsia. Hysterical anuria I think to be a *fiction* which is admitted by a majority of physicians; it is a phenomenon simulated by that variety of neuropaths which my friend Dupré has called "mythomaniacs," and who always disappear when they find that they are to be subjected to an examination which precludes deception. As to hysterical albuminuria, its existence is far from being proved.

Many cases of hysterical fever have been published, and there have been some recent cases in literature, but none of them appears convincing to me; either we have to do with cases in which the temperature has not been taken with all precautions calculated to prevent deception, or the patients have not been under observation long enough to prevent exclusion of an infectious disease. Generally, the reporters of such cases rest their diagnosis upon two arguments: the presence of hysterical stigmata and the apparent absence of all diseases that give rise to fever. These are reasons that are quite insufficient, for hysteria on the one hand does not confer immunity against other diseases, and, on the other hand, a diagnosis by exclusion is always subject to question. In order to demonstrate that fever can be the result of hysteria, it is necessary to present cases in which fever manifests the characteristics of other hysterical phenomena. Is it to be considered a primary hysterical accident? If so, it must be possible to produce it by suggestion and to cause it to disappear by persuasion. But it would be absolutely necessary to obtain immediate results in order to establish the relation of cause and effect between fever on one hand and suggestion and persuasion on the other, for an attack of very intense fever may disappear spontaneously after lasting a few hours. Is it to be considered a secondary accident? If so, let it be shown that the fever is subordinate to a primary accident, to an hysterical attack, for example. But here, too, there is a reef to be avoided, and it is necessary to be sure in the first

place that the patient under observation is not subject, under other circumstances, to attacks of fever; we know, in fact, that in tuberculosis any fatigue, a walk of half an hour, may provoke elevation of temperature; in such a patient the fatigue due to a grand hysterical attack might have the same effect, and under such circumstances there could be no question of hysterical fever.

Hysteria, in spite of the elimination of numerous troubles which have wrongly been made a part of it, occupies a very extensive field. If too often it is thought to exist where it does not, it still more often goes unrecognized in cases where it exists, not in its pure state, but in association with other affections, whether these be neuroses, organic diseases of the nervous system, or visceral diseases. I have insisted upon the frequency of these associations, * which Charcot was the first to emphasize, and which it is sometimes difficult and always very important to recognize; and they explain the seeming extraordinary success obtained in certain patients, incontestably afflicted with organic lesions, by the application of the various modes of psychotherapy.

Since analysis of the facts leads to the elimination from hysteria of all the objective phenomena which suggestion is incapable of inducing, perhaps some of you are lead to ask whether hysteria is really a pathologic state and whether the manifestations called hysterical are not simply simulated accidents. Here is my opinion on this point, which merits statement and discussion. From the observation of numerous hysterical persons whom I have followed, the conviction has arisen—and it is that of all neurologists—that many of these subjects are sincere and that they cannot be regarded as simulators; but I must confess that this idea is founded on arguments of a moral kind and that it cannot be demonstrated with the scientific exactness which is possible in the study of organic affections. A skillful simulator educated in the proper school might succeed in reproducing with precision all hysterical accidents; and this, of course, is a source

**Vide*, Association de l'hystérie avec les maladies organiques du système nerveux, les neuroses et diverses autres affections, par J. Babinski (*Société Médicale des hôpitaux de Paris*, 11 Nov., 1892).

of insurmountable difficulty in medico-legal cases of hysterotraumatism where an expert opinion must be given. There is also every reason to believe that many hysterical persons become simulators and succeed finally in reproducing at will, in accordance with their caprice or interest, disturbances which in the beginning were the result of suggestion or of auto-suggestion. I add, finally, that a true, sincere hysteric is never absolutely unconscious of his condition; for example, if during the attacks there is an hallucination where the patient sees himself surrounded by flames, he takes care, as some other hallucinated individuals do, not to fly from the imaginary danger and expose himself to a real one. According to my view, the hysteric is not unconscious, nor is he fully conscious, but he is in a state of subconsciousness.

After this exposition, gentlemen, there is no need to develop at length my conception of hypnotism. Various definitions have been given of this condition, for the most part based on the ideas which have been entertained of its intimate nature, its mechanism. Here is the one which formerly Dr. Bernheim proposed: "A special psychic state which may be provoked, and which brings into activity, or exalts in various degrees, suggestibility, that is to say, the aptitude of being influenced by an idea accepted by the brain and of realizing it." (*Psychotherapie*, p. 76.)

I think we should proceed with hypnotism as with hysteria, and in the first place, putting aside every theoretical idea, start upon a clinical foundation. When do we say an individual is hypnotized? When, after having practiced certain maneuvers, like fixing vision, pressing the eye-balls, or giving a verbal injunction to sleep, we have succeeded in developing certain nervous disturbances—paralyses, contractures, anesthasias, which we are able afterwards, at command, to cause to disappear and reappear. But these manifestations of hypnotism are absolutely identical with those of hysteria; for if we were ignorant of the circumstances which brought them about, it would be impossible to distinguish one from the other. Moreover, we have seen that the possibility of being reproduced with exactness by

suggestion constitutes one of the two characteristics of primary hysterical accidents. The only difference that distinguishes hypnotic manifestations from hysterical manifestations is that the former require, in order to develop, the intervention of a second person and the rôle of suggestion in their genesis is patent, while the latter seem to appear spontaneously as a result of auto-suggestion, but this is only a question of degree; and we have seen, moreover, that the symptoms of hysteria to which the most importance is attached, the pretended stigmata, are usually the result of suggestion.

I would add that it is not hypnotism which causes or exalts suggestibility, but that hypnotism is its consequence or manifestation.

This is my definition of hypnotism:

"Hypnotism is a psychic state rendering the subject presenting it susceptible to the suggestion of a second person.

"It is manifest in phenomena which suggestion causes and which persuasion removes, and they are identical with hysterical accidents."

As will be seen, hysteria and hypnotism are made of the same dough and run into one another, as I maintained some fifteen years ago,* in opposition to the declaration of Bernheim, who, however, at the present time tends to accept this view.

I forestall a question which you will be tempted to ask. If, as I maintain, to hypnotize is to develop hysterical manifestations, to hypnotize is then to induce an abnormal condition; how, then, can hypnotism be rightly employed therapeutically? I will explain myself on this point.

It is my opinion, in accord with this view, that the practice of hypnotism may cause injury. It is of a nature to induce in the mind of the hypnotized person an idea that he is influenced and incapable of resisting the will of others, and I find that usually it is better to avoid its use.

**Vide*, *Hypnotisme et hystérie*, par J. Babinski, 23 juni, 1891, publiée en *Gazette hebdomadaire*, juillet, 1891.

This article concludes as follows: "I believe I am justified in concluding from all this discussion that hypnotic phenomena are of the same essence as hysterical phenomena, and that ties of intimate relationship unite hypnotism and hysteria."

If I have to do with a patient of sufficient mental endowment to enable him to follow a line of scientific reasoning, I employ with him at once, as a means of treatment, so-called rational psychotherapy; I tell him that he presents no sign indicative of a grave disease; I assure him that he is a victim of an illusion, that he must be his own physician and get well through an effort of his own will. Thus I often obtain rapid and lasting cure of hysterical manifestations, especially in students of medicine. If the patient be of simpler mind and not accustomed to exercise reasoning, having, however, confidence in medicine, I limit myself to asserting, without any effort at demonstration, that the means at my disposal will bring about a cure, and in such instances I again make no attempt at hypnotism; that is, suggestion; I employ merely a kind of persuasion. But when I am in the presence of a patient presenting hysterical manifestations of long duration, tenacious, that have resisted the various means that are usually employed (hydrotherapy, electrotherapy, isolation, etc.), and if the patient after mature examination appears to me to be skeptical in regard to all therapeutic measures, I willingly resort to hypnotism, which has afforded me, as very many other physicians, remarkable results which I propose to explain. An individual afflicted with hysterical brachial monoplegia, which has resisted all means of treatment, has developed an idea that his paralysis is incurable; then, persuasion in this direction has no action upon him, but the patient in question is susceptible to suggestion, and the maneuvers of hypnotism, that is to say, of suggestion, of which he is the object, a kind of exercise to limber up the brain, show him that his physician is capable of paralyzing his other members and of curing them thereafter. Doubtless he consciously or subconsciously reasons as follows: "Since the physician has such power over me, causing paralyses to appear and disappear at his will, he is probably also capable of overcoming the brachial monoplegia which I regard as incurable." Such a patient then becomes susceptible to persuasion, and this advantage compensates largely for the inconvenience of suggestion, that is, of hypnotism.

It may be said in general that to treat hysterical persons properly, it is first essential to try to penetrate their state of mind and adapt to it the means of persuasion which are best suited to the case. In accordance with whether the patient is intelligent or not, whether desirous of getting well or indifferent, whether of gay or melancholy character, the reaction to persuasion will be different. There are difficulties in the manner of application of this treatment which make it clear why all physicians cannot employ it with the same success. If, now, we consider that hysterical accidents, when properly or improperly treated, may disappear in a few moments or endure forever, we are led to the conclusion that it is necessary to understand hysteria thoroughly and to apply psychotherapy with great judgment.

Gentlemen, before terminating, I would recommend especially that you consider the practical side of my definition of hysteria. According to my conception, this neurosis is made up of all disturbances which may be cured uniquely by direct or indirect persuasion. In order to emphasize this point I have proposed to call it "pithiatism," a neologism derived from two Greek words, *πειθῶ* and *ιατός*, the first signifying "persuasion," and the second "curability." This term would have the advantage of preventing all misunderstanding, for it would be impossible to confound in one classification phenomena called pithiatic, that is, curable by persuasion, and accidents on which persuasion has no influence or only a limited one.

My conception thus may be claimed to be in accord with a nosologic principle which has stood the test of time, for it is in conformity with the old adage: *naturam morborum curationes ostendunt*.

THE FOUNT OF EVIL.

(Sermons on Psychology.)

BY DR. ALBERT S. ASHMEAD.

NEW YORK.

"The wordly Hope men set their hearts upon
Turns ashes—or it prospers, and anon,
Like snow upon the Desert's dusty face,
Lighting a little hour or two—is gone."

(Omar Khayyam.)

I LIKE Omar, his calm and occasional cynical view of life is very supporting to me. Religion is better for the masses, but I am not among them—unfortunately for me, perhaps. At all events, Oriental Fatalism is not well received in the western world. But Fatalism IS, nevertheless.

How Omar is regarded at home, we are not informed.

A few years ago, the United States Minister to the Court of Teheran, at an interview with the Shah, requested the aid of the Ruler in the procuring of copies of Omar's writings. Majesty was somewhat mystified until it was interpreted to him that a number of people in this land, interested in Persian literature, had forwarded a request to be presented to him. He broke out with loud laughter. His manner was such that it was deemed politic to pursue the subject no further. It is believed that in his younger days, Omar was quite indulgent to himself in the luxuries and pleasures of the earth—the always new and ever old.

A man may keep up in life's turmoil with wonderful cheerfulness. Well, that is his temperament, innate. And yet, it is not the result of a philosophy.

Soul or spirit may not be individual at all, but operation of a law or laws and its impressions or cognitions mere markings upon matter in a living state. Certainly the soul or spirit is transmitted, retraced by what we call heredity. Then why not in some fashion, from twin to twin, from brother to brother or sister, or from parent to child, extra-uterine?

Were all the human races suddenly dead, where would be the intellectuality or morality, if you please, or the perfect adaptation to particular environment of the highest primate? Is there not in the next animal, in the scale of evolution, call it primate, if you will, the essence of a new soul? And would not that next primate develop a higher primate, a new "Man"? Then suppose further, that this primate, too, was suddenly extinct, in its entirety, not a seed left of it, would not the next animal, in the scale of evolved being, develop something "animal," superior to itself, in the ages to come? Thus, tearing down, devolving, all the organized structures of living things in turn from the highest to lowest organic life downward to vegetable living matter, would not changing planetary, climatic, geologic influences, again in eons of time build up a new series of living atoms with necessary attributes; for successful life against the elements of future special environment, which we, of our day, would call a "soul," or "spirit," an instinctive desire of living in the present and eternally?

Between instinct and reason there is no great gulf. Sir Isaac Newton believed that the brute mind was as much under Divine governance as the material matters, qualities and motions are; in other words that *mind* was created, and matter was created, and that the actions and passions of both were constantly under the guidance of the Creator. So that he would no more deny the separate existence of the minds of brutes than he would the separate existence of their bodies, or of the heavenly bodies. He said: "And the instinct of brutes and insects can be the effect of nothing else than the wisdom and skill of a powerful ever-living agent, who, being in all places, is more able by his will to move the bodies

within his boundless uniform *sensorium* and thereby to form and reform the parts of the universe, than we are by our will to move the parts of our bodies." He denied that the Deity is the "Soul" of the world. The Deity only "governs and guides," all matter by his "prevailing power and will." That Deity is "omnipresent not virtually alone but substantially." In him "all things are contained and moved, but without mutually affecting each other." (Principia, lib. III, Sch. Gen.)

Pope in his *Essay on Man*, says:

"See then the acting and comparing powers,
One in *their* nature which are two in ours;
And reason raise o'er instinct as you can,
In this 'tis God that acts, in that 'tis man."

Addison in the *Spectator* concludes that *instinctive* and *intelligent* operations can no more be explained than gravitation can; and they come not from any law of mechanism, but are an immediate impression from the first mover, and the Divine energy acting in the creature.

The Dogma of Newton is great authority—the greatest human authority—as a measurer of the intangibles, space and time, there is no better. This is the well considered opinion, regard being had to the awful nature of the subject, as well as the contemplative and *religious* nature of the man, of the greatest inquirer into Nature and Nature's law that ever existed. Our future existence, the spiritual "to be or not to be," as he defines it, depends on the "Deity", an all-powerful governor of our laws of being.

There is no design in activity of our atoms of matter any more than there is in the activity of the wasp carrying caterpillars or the bee making hexagons and rhomboids in its waxy mathematical chambers, always of the same shape and size. Matter obeys the certain laws of planetary being with mathematical exactness, just as the bee's mind works out its greatest problem (that of existence) and just as the stone falls to the earth, or the earth moves in her orbit.

Newton denied the supposition that the Deity was *Anima Mundi*—the soul of any part of Nature.

His theory held that the mind endowed with certain

qualities originally at its creation, those qualities are summed up in acting without knowledge or design, as instinctive mind.

Mind is a blind instrument in the Creator's hands, its knowledge or "design" reside out of itself, and in some other intelligent being which is commonly called the Deity. The wasp has *pleasure* in bringing together in one place eleven caterpillars, no less, no more. Yet the wasp never tastes those caterpillars. Why? And why always eleven? The bee traces her lines and angles so exactly, under strong desire. Both desires or "plans" may be interrupted by obstacles with *pain* to the wasp and bee to be pursued again afterwards, with returned *pleasure*. These desires (plans) are the animal's nature, the *law* ("Deity") requires them to obey their impulses, just as the *law* (Deity") requires the stone to fall to the earth. That the bee forms a cell and the spider a web, are merely irresistible *desires*.

All knowledge and intelligence in man is similar to the instinctive design or reason in the lower forms of life.

Mules begotten or flies deceived by false scent, into depositing their eggs on vegetable instead of necessary animal matter, where maggots could breed, are evidences of mistaken instinct or of "reason" as we call it in highest forms of living matter as for instance, the violations of our so-called intellectual and moral law. All species will die out, if their "moral" law is not maintained. Here we are at the very fount of evil, wrong adaptation of living activities of a species to environment or peculiar necessities of existence at a given moment.

Man's moral feelings or actions are not instinctive, but due to the operation of his certain physical natural laws of being, or his governmental command and social surroundings.

Buffon claimed that the beaver with exactness of reason, the exquisite building of its double doored, double roomed house, always perfectly adapted against change of tide, was the only subsisting monument of the *ancient* intelligence of brutes, that is *when man was not*.

Devolution and extinction of many species of living matter is synchronous with evolution of higher mind (better adaptation to environment) call it intellect, design of the Creator, morality, or what you will, in other forms, and in the highest primate man.

The question of evolution or of devolution, depends wholly on success or non-success, in battling with geographical, commercial or geological fate—enemies or evils.

More or less complete adaptation to the existing requirements of the life's moment, in planetary history, means pleasure or pain, good or evil, health or sickness, and in accordance with the measure of completeness, is the measure of each. Absolute incompleteness means death of the individual. And if the instincts necessary for the battle be lost, or of special requirement to retain them is not handed down somehow, by example or by history, or by law, through succeeding generations, then death of the whole family or community extinction of the species or form of being, must result.

Thus man might become extinct were his knowledge (instinct) of how to live "rightly" to constantly re-adapt himself to the changing conditions of his environment, planetary and otherwise, lost to him. Then the next primate might become supreme on earth, where would be, then, our ideas of God and Immortality? Would they again be evolved in brute mind of some lower being?

Human life amounts only to this—we are all at unrest. There are but three events in any organic existence: (1) We wind our watch at 9 A. M. to keep in touch with time; (2) Where and what shall we eat and drink at noon, and at what hour must we leave the veranda and return; (3) Waiting for the darkness, in order to burn a bit of tobacco *which is bad for us*. Life and lemons!

REPORT OF A CASE SHOWING CONSTITUTIONAL DEFECTS;

Changes in Manner of Thought at Middle Life; Dissatisfaction and Litigation Regarding His Rights by Will and Culmination in Revolver Episode.

Commitment as Insane and His

Discharge as Not Insane.

BY ELBERT M. SOMERS.

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FAMILY HISTORY.—No history of insanity; father and mother died in old age; a brother and sister “peculiar;” one brother successful attorney, but said to have had supernumerary fingers of both hands.

PERSONAL HISTORY.—Born in New York State; age fifty-two; single; at birth he had supernumerary fingers on both hands which were amputated later; developed well as a child and youth, showing no unusual traits, being apt in school life. At age of 25 graduated from the Illinois State University and at 28 was admitted to the bar. He followed his profession in Chicago for about seven and one-half years, meeting with moderate success and accumulated some money. In 1887 he went to Duluth, Minn., for the purpose of speculating in real estate.

At the end of five years, (1892,) however, his own money, as well as that of several others, was lost and he was burdened with debts. He attributes his misfortune

largely to the fact that at that time general financial depression occurred throughout the country. Such a general depression did occur at that time. He then removed to Detroit, Michigan, and devoted himself to studying economic questions, particularly the cause and effects of financial depression. While thus at work he changed his name, giving his reasons as follows: "I changed my name from the fall of 1892 to March, 1893, because I did not wish people to know that I was outside of my general business, and because I wished to quietly and uninterruptedly study the cause of the recent financial depression." "Probably six of my near friends knew of my changed name because I wrote them so." "As the result of my work in Detroit I published one thousand copies and headed them, 'A Timely Warning,' which was written to try and bring about harmony between man and man."

A verified statement of his shows his motive for venturing into this field, viz.: "During the year 1892, I was made to realize that there were causes at work which would gradually ruin individuals and ultimately the nation; that there was absolutely no ground for any person except to remove the cause of such discord and therefore undertook to study out the causes of discord, in order to be able to teach the causes, so that the causes of discord might be removed."

At or about this time he wrote a few personal letters directed against both the Protestant and Catholic Churches, but later discovered that his ideas were wrong and retracted them. Regarding this his brother wrote: "He wrote me about the year, 1895, that he could not go from Philadelphia to New York to meet me because if he got into New York City he would never get out alive." This statement the subject denied ever writing.

As the result of his life in Detroit, his father, aged about 76 years, in 1892 modified an originally fair will by giving the sums awarded him to his two brothers in trust to be used for the benefit of the subject of this article, as such trustees might think best. The father in 1897 again

modified his will by providing that the money in trust be invested and interest paid the subject, and also giving the trustees power to advance whatever of the principal in their good judgment they thought necessary for the maintenance of the weaker brother, and after his death the amount remaining was to go to surviving children of the will-maker. This last codicil was drawn by one of the named trustees who was an attorney.

The student of economic questions continued his studies, being conscious of a steady growth along these lines of thought, although obliged to discard many of his earlier doctrines. He said, "... reflecting over the financial questions, I saw I had not gotten at the root of the matter (as embodied in his 'Timely Warning') and published a leaflet in 1894 in Washington." He lectured frequently in Washington, several places in Maryland, Pennsylvania, later frequently before the Single Tax Society and Liberal League Society of Philadelphia, and according to his brother was author of a paper devoted to financial questions called, "*The Sunlight Herald*." While continuing to lecture in several cities, especially in Chicago nightly for four months, he issued in 1897 a pamphlet called "The Effect of Money." Again in 1898 he wrote a short article criticising the scheme of bonds issued by the secretary of the treasury for war purposes. This article he called, "The War with Spain."

In 1899 his father died and the subject, rebelling against the provisions in his father's will, instituted as his own attorney two special proceedings and one supreme court action in prosecuting his rights; removing East in order to devote his time to carrying on the litigation and at the same time doing day labor, if necessary, to support himself. There was considerable delay and slow progress because of his not being familiar with the laws of New York State, and the brother trustee as one of the defense, being an attorney, readily took advantage of these technicalities.

He continued in his thought and published in 1902 an elaborate article with illustrations called, "Monopolies and Trusts, the Cause and Only Remedy." As this was his final

and matured utterance it might be well to note some of the statements therein. Under the heading "Plain Statements to be Proven" he says:

(1.) "We shall here prove that we create and support unjust monopolies by our money laws."

(2.) "We shall also here prove that our laws provide that all new and original money should be made by the United States, but owned by private persons and corporations, and that no new money shall be owned by United States, and that this is the primary cause of all unjust monopolies and labor troubles."

(3.) "It has been estimated that the people of this country have paid to the money dealers of the world over three hundred thousand millions of dollars in rents, interest, income and profits since the landing of our forefathers on this continent."

(4.) "This vast sum is more than three times the value of all the wealth in this country to-day." "All of this vast and incomprehensible amount of wealth that has been taken from the producing people of this country and squandered and monopolized by the money dealers of the world would have been possessed and enjoyed by the people of this country had the people never adopted, by custom or by statute law, our present system of money."

(5.) "The money monopoly is the monopoly that is gradually monopolizing all other monopolies and all the wealth of the world."

(6.) "There can be no remedy for unjust monopolies and trusts until we repeal and modify our entire system of money laws."

His remarks embodied a long and wordy criticism of trusts, banking houses and other monopolies, which he considered the causes of riots, high tax rates and pauperism, and went on to give eleven reasons why national paper money should be beneficial to the unfortunate majority. "The remedy" in substance, he says, "is to stop creating monopolies by repealing the laws providing for making of more gold, silver and bank notes and issuing only Govern-

ment paper money, which can only be paid out to those who earn it or for public purposes." Finally, he closes by an appeal headed as follows:

"TO THE MEN AND WOMEN OF AMERICA:"

"A glance at plates two and three will convince you that if we continue to make gold, silver and bank notes, we must continue to operate under the plans in those two plates (*i. e.* giving the ownership to a class of private persons and monopolies,) and that the struggles of life, on the average for all people, must become more severe and the people more selfish and necessarily more degenerate each succeeding year, and that by tolerating our laws for making more gold, silver or bank note money we must thereby force upon helpless and defenseless babies, whose eyes have not been opened to see their oppressors, and on unborn souls and on those that are to be conceived in all the ages to come, conditions that must constantly make the struggles of life more severe for them, and that must make them more selfish and consequently more degenerate each succeeding year they live."

"This is not an appeal to the prejudices of the ignorant and the bigot, but to the intelligence and the manhood and womanhood of the people."

In inquiring further into his mode of life and conduct during the above seven years, devoted to economic questions, nothing further was learned of any moment except that he had become a vegetarian. This was accounted for by him upon the usual grounds given by vegetarians.

Coming now to a more important period concerning his quarrel with his brother, it transpired that in the spring of 1903 they had come to some understanding relative to settlement, whereby respondent was willing to accept one thousand dollars in full for amount due him from his father's will. Several dates were fixed for payment, but the brother trustee failed to keep the appointments. May 20 was the final date set by the trustee and the subject assured of his money. However, upon this date the trustee was called away and so wired his brother and promised to write. However, he failed to do so. Thereupon the respondent resolved to get the money by vigorous methods of his own. Two methods suggested themselves to him. One was to

hire some powerful man to assault his brother with fists, and the other was to compel his brother by personally interviewing him at the point of a revolver. The latter method appealed to his judgment. For three weeks he pondered upon the plan, bought an ordinary revolver and occasionally practiced with it. During this period his mode of life and conversation showed nothing unusual. On June 10, 1903, he appeared at his brother's office, which was located in a large business block, so timing his arrival that he would find him alone. He was armed with a revolver in which he had inserted cartridge shells filled with only putty so prepared as to closely resemble leaden bullets. When within his brother's private office he pointed the weapon at his brother and made demands that he be paid the money as oftentimes agreed upon. The brother complied though the ways and means of getting the sum occupied half an hour or more. In the conversation it was also brought out that the trustee had been served with a copy of an order appointing a receiver for his brother in supplementary proceedings growing out of his Duluth career. This excuse was unavailing. Respondent was very insistent and repeatedly threatened his brother with death if his demands were not complied with. As the brothers were leaving for the bank to get the money, opportunity was had to communicate with police authorities, and upon their appearance respondent attempted to escape, but was apprehended on the ground floor. He then laughed and said his trial would be the funniest one ever heard. He was upon the same day examined and pronounced insane, the commitment being based upon the history of his career and especially the revolver episode. A hearing was immediately demanded through the subject's attorney and was conducted by a referee who rendered a decision ten days thereafter to the effect that the subject was insane. Nothing new was brought out at the hearing and the subject testified in a frank and candid manner and exhibited an unusually accurate memory. However, the referee saw fit to state without specifying, "His examination, taken alone, while demonstrating great lack of mental balance, exhibited

to the lay mind no certain evidences of insanity." The referee's decision was that he was insane, after taking into consideration his profession, his previous conduct, his crude and illogical ideas of reform and finance, his abandonment of other interests to pursue litigation and the carefully planned attack with a harmless revolver.

It was the opinion of the referee that were it not for the revolver episode the person could be classed among the eccentrics—a hoverer about the borderland of insanity. The readiness with which he entertained suggestions of lawless conduct led the referee to conclude that the subject was of such a defective mentality that he must be insane though he stated that he found no evidence to "indicate a disposition on the part of the respondent to do actual harm to any person." . . . "His insanity is not of a character to endanger himself or the public." From this decision there was promptly an appeal to a justice of the supreme court who issued a stay in the above proceeding, pending the determination of the appeal.

In the meantime the person in question was cared for in an unsuitable place and after considerable delay the city authorities and the attorney for the alleged insane person petitioned the justice that he be transferred to this institution without further delay, as there would not be a regular term of the supreme court for three months, and because of the unsuitable and unhygienic temporary abode. Thereupon, the justice, deeming that he had satisfactory evidence of the person's insanity ordered him committed July 18, 1903, and in so doing stated that such an order by him would not prejudice the appeal from the order of commitment made previously by the lower court. It was learned that the subject from the time of his hearing up to his admission here had shown no new phases, expressed no noteworthy utterances and was willing to be transferred to a state hospital. The justice, at the time of commitment, wrote a letter stating in substance that he was somewhat in doubt about the man's insanity, but hoped to thereby get a medical opinion which would guide him.

ADMITTED JULY 18, 1903: On admission: patient was fully oriented; had an accurate grasp on his surroundings; adapted himself readily; attitude was without constraint; manner calm; discussed his case freely. He expressed satisfaction that he was now in a position where his mind could be properly judged.

PHYSICAL EXAMINATION: A large framed individual with fair nutrition, but slightly anemic; no external evidences of disease; temperature normal; cephalic index 75; asymmetry of face (see photographs;) V-shaped palate with *torus palatinus*; evidences of supernumerary fingers (re-duplication of little finger both hands;) slight curvature of dorsal vertebrae to the leftward; larynx deviated slightly to the right. Patient gave no account of ill health. Further examination showed slight cardiac hypertrophy and some arterio-sclerosis with increased quantity of urine (60 ounces in 24 hours) and hyaline casts.

Further mental examination showed clear stream of thought and a ready disposal to discuss the phases of his life experience. He stated that he had no ill-feeling against his brother, but that he felt as if he was justified in taking the legal steps he had to prosecute his rights in respect to his father's will. He felt as if there must have been some undue influence brought about by his brother in respect to his father, and that an exaggerated account must have been made of his business ventures. From his point of view, he could not see any good reason why his financial failures or his publications regarding finance should be the cause of his inheritance rights being placed in trust and seriously doubted that his father would have done so uninfluenced. During the interview, patient showed a remarkably ready flow of language and frankly gave full details, which would be looked upon as along the line of facts rather than opinions.

He admitted that his losses in Duluth caused him considerable mental distress and that, being naturally of a studious make-up, turned his attention to the study of financial questions, admitting at the same time that such



RIGHT FACE.



FULL FACE.



LEFT FACE.

lectures brought him, in a measure, a fair means of livelihood. Having started and becoming interested in such matters at a time when allied questions were more or less in the air, he felt compelled to go on, especially as he had received some encouragement from men who held similar ideas, particularly members of the Single Tax Society at Philadelphia, and even from a politician of national reputation, as he stated. He added that the litigation with his brother was a mere incident of his life, and being naturally of a tenacious make-up, would follow out his litigation and take the consequences. He rather graphically described the interview with his brother and the revolver episode—how he stood up as closely as possible, and represented, by his attitude and facial expression, a fiend in deadly earnest. He felt that his brother had temporized long enough, and feeling that he had the stronger mind would be able to cause his brother to submit and pay.

As to actual facts and dates and circumstances thereafter, he continued scrupulously accurate. Upon several interviews, patient's story was consistent and free from apparently delusional references. The only quarrel that he had with his brother was over the matter of the trust fund and the circumstances of both connected therewith. He gave his brother due credit for all other qualifications which he may have had, and had no criticisms to offer regarding him otherwise.

Patient's judgment in general matters was found to be good and he had a wide knowledge of common events and had evidently been a great reader and interpreted general matters correctly. He showed no morbid self-consciousness and was not augmentative in make-up. He was certainly very familiar with legal matters. He attached no undue value to the estate that was due him, nor had unreasonable plans of expenditure. His intention in the future was to re-establish himself in law practice in Chicago.

His judgment relative to the revolver episode was to the effect that he did not see wherein he had done anything wrong, for he said the revolver was not loaded, that he

did not point it at his brother, that he had no motive other than to scare his brother. He felt as if the time had come when something like this should be done as his brother had deceived him and imposed upon him and he had become entirely out of patience. He did admit that as matters turned out he made a mistake in creating such a scene, and that hereafter he would let the law take its course.

Frequently, while at the institution, patient was observed both day and night and nothing of note whatever was found. He devoted the majority of his time to reading papers and books. He adjusted himself readily, made friends and kept his affairs to himself, except when talking to those in authority. While here he wrote several letters to near friends and especially to his attorneys. These, however, showed nothing abnormal and embraced mostly remarks relative to his recent experiences, his belief in his rights, his understanding that he was sent here temporarily. He was discharged as not insane August 26, 1903.

After leaving the institution, he remained at the house of a friend in a neighboring city. Soon after leaving he made some remarks regarding his care at the institution, which were of a favorable nature. He soon devoted his time to legal matters pending, viz: appeal to the supreme court from the judgment that he was insane and his action brought sometime ago to compel his brother, as trustee, to account for trust funds, and to ask why he should not be removed.

At the October session of the supreme court he was declared sane by a jury. In May, 1904, he secured an order from the supreme court to show cause why his brother should not be made to turn over the trust funds pertaining to his father's estate; (the court previously at special term in March having directed the brother trustee to turn over to another trustee the amount due the ex-patient.) The proceedings, however, were abruptly brought to a close by the brother trustee sending to the new trustee the full amount due with interests and costs, which was \$2,509+.

In July, 1904, the brother, who had been deposed as trustee two months previously, committed suicide by cutting his throat, it being the day on which his home was to be sold in mortgage foreclosure proceedings. It then came to light that the suicide had been a gambler, and several times a forger, the last time in order to raise money to meet the demand of the court concerning the trust funds.

Shortly afterwards the former patient appeared at the institution and demanded a copy of his commitment papers, and such request being within his rights it was granted. At that time he seemed natural; briefly deplored his brother's death, and intimated that his intention was to return West.

In the summer of 1905 he did so, remaining there until the fall of 1906 when he again returned East to attend to some business matters pertaining to his sister's estate, she recently having died. Present reports concerning him reveal nothing of note.

In this case there are two conditions, which stand out prominently and obviously have close relationship, namely: his constitutional make-up and his reactions to stress.

There was apparently a long period of normal mental life in spite of his well marked physical stigmata, though probably there were present all the time atypical traits of intellect, which were to a sufficient degree submerged by a good education and a fairly strong personality.

The abandonment of a law practice, the speculative career and the Utopianism were nothing more or less than repetitions of the experiences of many others, and could be summarized as impracticable, ill-advised and uncommon to his method of life.

His statement that lectures and writings gave him a means of existence was probably as true as his disposal to believe that there were conditions of finance at work liable to ruin the nation, and he continued to make it his business to write theories on finance which were about as disharmonious as his defects in physical evolution.

The quarrel with his brother, under the known circumstances, was not upon a delusional basis.

“LA PHOBIE DU REGARD.”

BY C. H. HUGHES, M. D.,
ST. LOUIS.

AN abstract by W. C. Sullivan, M. D., in last July Journal of Mental Science of an interesting communication from Bechterew in the “Archives de Neurologie” for July on this subject, calls to mind one of my own recent cases and one specially remote case.

The remote case especially contributed to sustain the author's view that it frequently develops as an immediate sequence of sexual exhaustion, particularly when brought about by masturbation, while the present case rather controverts the sexual exhaustion causation view, though the latter is markedly associated with other phenomena of morbid neurasthenic irritation, such as the phobia of blushing, though there was no inability to micturate before others, as the party having been profoundly prostrate after a period of neurasthenic delirium required catheterization at times, and the use of the urinal at the hand of a trained nurse.

These cases in milder form are what we know as shamefacedness, sustaining about the same apparent relationship to the latter as ordinarily seen, that settled and deep melancholia does to an ordinary fit of the blues, and of course are often encountered, in mild degree, in abandoned masturbators and the otherwise sexually exhausted. The first case of our own here referred to was one of erotopathic insanity without furore of nymphomania. The young lady indited amorous epistles to the asylum superintendent, yet always naively veiled her face in the asylum to the superintendent, patients and attendants. To such an extent was this shamefacedness and erotism combined that it was deemed

wiser to send the patient home than to keep her in the institution. Her mental condition was rather one of pure psychoneurasthenia than mania. She being one of those cases wrongly certified by the family physician as insane, because of this peculiar and persistent phobie du regard and morbidly intensive erotism.

The other case was markedly different, being a man of affairs, married satisfactorily and broken by overbrain strain in a large business enterprise which proved financially successful. The business required most disagreeable travelling, through a woody country, both on horseback and afoot, causing him to break in brain on a final, forced and hungry tour, concluding with a last night and day without sleep. He broke down with psychoneurasthenia. This occurred more than fifteen years ago.

This experience with psychoneurasthenic delirium, lasted nine months before he apparently regained his normal mental strength. But his convalescence was not then complete. It seldom is when the patient decides it is. The last acute attack was briefer in duration than the previous one, but he still has the phobie du regard remaining to some extent, though he can now take his meals at table, when only his wife is with him or a few others. His phobia still embraces fear of wide expanses of country, (space phobia) especially of wooded country and fear of many people in a crowd (crowdphobia) if you will accept the term. He blushes readily on slight occasion in private conversation when speaking himself, especially when relating a story and the speech not being such as would cause a flush on the cheek of any ordinary person or upon his own when he has been quite well in his nervous system.

In Beards' neurasthenia or cerebraasthenia this phobie du regard would appear as homophobia and gynephobia, but he has neither, so far as single individuals are concerned, though earlier in his malady he would blush and be halt of speech when speaking alone to me with no other auditor.

This fear of coming under the observation of others, this dread of going into the presence of others, this aver-

sion to seeing new faces was noticed by Rush* and Beard, but not so much significance given to it as it deserves in determining the completeness of convalescence in making a prognosis. It is a peculiar timidity and irresolution which I have elsewhere described as symptomatic of the psychic form of neurasthenia.

Though rarer than the other phobias of psychasthenia it more usually accompanies the grave and more chronic forms of cerebrasthenia and is of more serious import. The victim of folie du regard is nearer to folie du doute and suspicious insanity. We see this more often within, than without, our hospitals for the insane.

* "Unreasonable fear of speaking in public."— Stage fright.

A SUMMARY OF THE PATHOLOGICAL FINDINGS IN 147 AUTOPSIES PERFORMED AT THE CENTRAL INDIANA HOSPITAL FOR THE INSANE,

FROM SEPTEMBER 1ST, 1903 TO OCTOBER 31ST, 1906.

By DR. C. F. NEU, PATHOLOGIST.

SINCE pathology and pathological conditions have been the doorway by means of which so much of our information has been gained as regards the relations that exist between certain definite clinical signs and symptoms and certain more or less definite alterations from the normal in structure and function of one or more of the organs or tissues of the body, the object in presenting this report is to call attention to some of the more important conditions that have been found associated with certain symptom-complexes involving more particularly the psychical functions. These conditions may be taken as an indication of the direction in which future investigations should proceed in determining the causative factors that are probably instrumental in producing them, in determining the means and measures to be made use of to prevent their development, and in suggesting the line of treatment to be pursued when it is found that they have developed.

Sex—	Males 76.	Females 71.
Age—	Under 20 years.....	2
	20 to 30 “	9
	30 to 40 “	20
	40 to 50 “	36
	50 to 60 “	43
	60 to 70 “	24
	Over 70 “	13

Number of admissions:

122 were credited with one admission.

18 " " " two "

6 " " " three or more admissions.

1 not insane.

Form of psychosis as given per record:

Melancholia: Acute, 6	Chronic, 16	Recurrent, 2	Agitated, 1
Mania: " 8	" 28	" 2	
Epileptic insanity.....	31	Senile paranoia.....	1
Acute confusional insanity.....	2	Dementia senilis.....	10
Circular insanity.....	1	" organic.....	5
Toxic insanity.....	1	" primary.....	4
General paresis.....	21	" secondary.....	5
Tabo paresis.....	1	Not insane.....	1
Chronic paranoia.....	1		

Cause of Death—Tuberculosis, 26; asphyxia, 17; pneumonia, 25, either as lobar, lobular or hypostatic; pulmonary oedema, 12; paretic convulsions, 11; epileptic status, 9; chronic myocarditis, exhaustion, 5 each; entero-colitis, brain tumor and acute peritonitis, 4 each; cerebral hemorrhage, acute suppurative meningitis, 3 each; pyothorax, hemorrhage meningitis, mammary carcinoma, uterine carcinoma, intestinal gangrene, gastric carcinoma and acute endocarditis, 2 each; general pyaemia, uraemic convulsions, shock, acute hemorrhagic pancreatitis, gall-stone obstruction, angina pectoris, acute arsenical poisoning, dilatation of the heart, abscess of the liver, pulmonary infarction, chronic nephritis, acute pericarditis, and rupture of the aorta, 1 each.

In some cases there were several conditions present which made it practically impossible to say which was the predominating cause.

MORBID ANATOMICAL CONDITIONS.

Cranial bone changes in 1 acute and 4 chronic melancholia, in 3 acute and 4 chronic mania, in 9 epileptic insanity, in 9 general and 1 tabo-parésis, in 1 senile paranoia, in 1 organic, 4 senile, 1 primary and 2 secondary dementia; a total of 40.

Changes in the dura in 3 acute, 10 chronic, 1 agitated and 2 recurrent melancholia, in 3 acute, 16 chronic and 2 recurrent mania; in 17 epileptic insanities, in 2 acute con-

fusional and 1 circular insanity; in 14 general paresis, in 1 senile and 1 chronic paranoia, in 2 organic, 8 senile, 1 primary and 4 secondary dementia; a total of 88.

Changes in the arachno-pia-mater in 3 acute, 10 chronic, 1 agitated and 2 recurrent melancholia; in 4 acute, 19 chronic and 3 recurrent mania, in 24 epileptic, 2 acute confusional and 1 circular insanity, in 19 general paresis and 1 tabo-paresis, in 1 chronic and 1 senile paranoia, in 2 organic, 9 senile, 2 primary and 5 secondary dementia; a total of 109.

Cerebro-spinal fluid changes in 4 acute, 7 chronic and 2 recurrent melancholia, in 6 acute, 15 chronic and 1 recurrent mania; in 21 epileptic, 2 acute confusional, 1 circular and 1 toxic insanity, in 20 general and 1 tabo-paresis, in 1 senile paranoia; in 2 organic, 12 senile, 3 primary and 4 secondary dementia; a total of 103.

Cerebral hemorrhage in 1 chronic melancholia, in 3 chronic mania, in 3 epileptic insanity, in 1 secondary dementia; a total of 8.

Hemorrhage meningitis in 2 chronic melancholia, in 1 acute and 3 chronic mania, in 1 epileptic insanity—7.

Acute suppurative meningitis in 1 chronic melancholia and 2 chronic mania—3. These were of pure pneumococcal infection, and in only 1 was there a well marked pulmonary involvement.

Brain atrophy in 2 acute, 8 chronic and 1 recurrent melancholia, in 1 acute, 15 chronic and 1 recurrent mania, in 8 epileptic, 1 circular and 1 toxic insanity; in 12 general and 1 tabo-paresis, in 1 senile paranoia, in 1 organic, 9 senile, 1 primary and 4 secondary dementia—67.

Brain softening in 1 acute and 1 chronic melancholia, in 2 chronic mania, in 5 epileptic insanity, in 1 general paresis, in 1 organic, 1 senile and 1 secondary dementia—13.

Local areas of sclerosis in 2 recurrent mania, in 1 epileptic insanity, in 1 senile paranoia—4.

Oedema of the brain in 2 acute melancholia, in 1 acute mania, in 2 epileptic and 1 acute confusional insanity, in 2 organic dementia—8.

Brain tumor in 2 epileptic insanity, in 1 general pare-

sis, in 4 organic dementia, in 1 secondary dementia—8.

In one of epileptic insanity and in that of general paresis the tumors were small and attached to the inner surface of the dura.

Dilatation of the cerebral ventricles in 4 chronic melancholia, in 6 chronic mania, in 9 epileptic insanity, in 13 general paresis and 2 tabo-paresis, in 1 organic, 5 senile, 1 primary and 1 secondary dementia—42.

Granulations of the ependyma in 1 acute and 1 chronic melancholia, in 1 acute, 4 chronic and 1 recurrent mania, in 4 epileptic and 1 circular insanity, in 13 general and 1 tabo-paresis, in 1 organic and 1 primary dementia—29.

Cystic choroid plexus in 1 acute, 6 chronic and 1 agitated melancholia, in 1 acute, 3 chronic and 1 recurrent mania, in 8 epileptic, 1 circular and 1 toxic insanity; in 9 general and 1 tabo-paresis, in 1 senile paranoia, in 1 organic, 3 senile and 1 secondary dementia—39.

Spinal cord changes in 2 chronic and 1 recurrent mania, in 1 epileptic insanity, in 2 general and 2 tabo-paresis, in 1 organic and 1 secondary dementia—10.

Pineal gland enlargement in 2 chronic mania, in 1 epileptic insanity—3.

Cerebellar cyst in 1 senile dementia.

Cerebellar tumor in 1 melancholia.

Cranial nerve involvement in 1 agitated melancholia, in 1 recurrent mania, in 3 epileptic insanity, in 4 general paresis, in 1 senile paranoia, in 3 organic and 2 secondary dementia—15.

Pericardial changes in 1 acute and 5 chronic melancholia, in 2 acute, 6 chronic and 2 recurrent mania, in 2 epileptic, 1 circular and 1 toxic insanity, in 1 general paresis, in 1 chronic and 1 senile paranoia, in 4 senile and 1 secondary dementia, in 1 not insane—29.

Endocardial changes in 1 acute and 1 recurrent melancholia, in 1 recurrent mania, in 1 general paresis—4.

Myocardial changes in 1 acute and 4 chronic melancholia, in 1 acute, 6 chronic and 1 recurrent mania, in 2 epileptic insanity, in 3 general and 1 tabo-paresis, in 1

chronic and 1 senile paranoia, in 1 organic and 4 senile dementia—26.

Pronounced fatty infiltration of the heart in 3 acute and 1 chronic melancholia, in 1 acute and 3 chronic mania, in 13 epileptic and 1 circular insanity, in 1 general paresis, in 1 senile paranoia, in 1 organic, 1 senile and 1 secondary dementia—27.

Pronounced cardiac hypertrophy in 4 acute and 8 chronic melancholia, in 2 acute, 6 chronic and 3 recurrent mania, in 11 epileptic and 1 circular insanity, in 7 general paresis, in 2 organic, 4 senile and 2 secondary dementia—50.

Cardiac dilatation in 1 acute, 3 chronic and 1 recurrent melancholia, in 1 acute, 3 chronic and 1 recurrent mania, in 5 epileptic and 1 acute confusional insanity, in 2 general and 1 tabo-paresis, in 1 senile paranoia, in 1 organic, 3 senile, 1 primary and 2 secondary dementia, in 1 not insane—28.

Valvular disease in 3 acute and 8 chronic melancholia, in 5 acute, 21 chronic and 1 recurrent mania, in 8 epileptic and 1 circular insanity, in 10 general paresis, in 1 senile paranoia, in 2 organic, 8 senile and 3 secondary dementia—71.

Patent foramen ovale in 1 chronic melancholia, in 1 chronic mania, in 3 epileptic insanity and toxic insanity—6.

General arterio-sclerosis in 5 acute, 14 chronic, 1 agitated and 2 recurrent melancholia, in 8 acute, 27 chronic and 2 recurrent mania, in 26 epileptic, 1 acute confusional, 1 circular and 1 toxic insanity; in 19 general paresis, in 1 chronic and 1 senile paranoia, in 5 organic, 10 senile, 2 primary and 5 secondary dementia—131.

Atheromatous degeneration of the arteries in 3 acute, 8 chronic and 2 recurrent melancholia, in 5 acute, 15 chronic and 1 recurrent mania, in 10 epileptic insanity, in 7 general paresis, in 1 chronic and 1 senile paranoia, in 3 organic, 10 senile and 3 secondary dementia—69.

Aortic dilatation in 1 chronic and 1 recurrent melancholia, in 3 chronic mania, in 3 general paresis, in 1 senile paranoia, in 1 organic, 2 senile and 2 secondary dementia—14.

Aortic rupture with hemorrhage into the pericardial sac in 1 chronic mania.

Pleuritic adhesions, right side in 4 acute, 11 chronic, 1 agitated and 2 recurrent melancholia, in 3 acute, 21 chronic, and 2 recurrent mania, in 21 epileptic, 1 acute confusional, 1 circular and 1 toxic insanity, in 10 general paresis, in 1 senile paranoia, in 3 organic, 9 senile, 2 primary and 4 secondary dementia, in 1 not insane—98.

Left side in 4 acute and 8 chronic melancholia, in 7 acute, 21 chronic and 2 recurrent mania, in 21 epileptic and 1 acute confusional insanity, in 8 general paresis, in 1 chronic and 1 acute paranoia, in 1 organic, 7 senile and 4 secondary dementia, in 1 not insane—87.

Hydrothorax in 3 chronic melancholia, in 1 acute and 6 chronic mania, in 1 epileptic insanity and 1 toxic insanity, in 1 organic and 1 senile dementia—14.

Pyothorax in 3 chronic melancholia, in 1 acute and 3 chronic mania, in 1 epileptic insanity, in 1 primary and 1 secondary dementia—10.

Hemothorax in 1 case of organic dementia.

Lobar pneumonia in 1 acute and 2 chronic melancholia, in 4 chronic and 1 recurrent mania, in 2 epileptic and 1 acute confusional insanity, in 4 general paresis, in 2 senile dementia—17.

Broncho-pneumonia in 1 acute and 1 chronic melancholia, in 3 acute and 3 chronic mania, in 2 epileptic insanity, in 1 acute and 1 primary dementia—12.

Hypostatic pneumonia in 1 acute, 5 chronic and 1 agitated melancholia, in 2 acute, 5 chronic and 1 recurrent mania, in 11 epileptic and 1 circular insanity, in 5 general and 1 tabo-paresis, in 2 organic, 3 senile, 1 primary and 1 secondary dementia—40.

Pulmonary oedema in 2 acute, 5 chronic and 1 recurrent melancholia, in 2 acute, 6 chronic and 2 recurrent mania, in 15 epileptic insanity, in 7 general paresis, in 4 senile and 2 primary dementia—46.

Pulmonary emphysema in 2 acute, 3 chronic and 1 recurrent melancholia, in 2 chronic and 1 recurrent mania, in

5 epileptic insanity, in 1 general paresis, in 1 chronic paranoia, in 1 organic, 5 senile and 1 secondary dementia—23.

Pulmonary gangrene in 1 recurrent mania and 2 epileptic insanity.

Pulmonary infarction in 1 chronic and 1 recurrent melancholia, in 2 chronic and 1 recurrent mania, in 1 general paresis—6.

Extensive anthracosis in 1 epileptic insanity, in 1 senile dementia, and in 1 not insane.

Tuberculosis (pulmonary) in 1 acute and 7 chronic melancholia, in 2 acute, 18 chronic and 1 recurrent mania, in 12 epileptic, 1 acute confusional and 1 toxic insanity, in 4 general paresis, in 1 senile paranoia, in 1 organic, 3 senile, 2 primary and 4 secondary dementia, in 1 not insane—59.

Bronchial changes in 1 acute, 6 chronic and 2 recurrent melancholia, in 3 acute, 8 chronic and 3 recurrent mania, in 11 epileptic insanity, in 2 general paresis, in 1 chronic paranoia, in 1 organic, 2 senile, 2 primary and 2 secondary dementia, in 1 not insane—45.

Bronchial gland changes in 2 acute, 9 chronic, 1 agitated and 1 recurrent melancholia, in 5 acute and 18 chronic mania, in 13 epileptic, 1 acute confusional, 1 circular and 1 toxic insanity, in 5 general and 1 tabo-paresis, in 1 chronic paranoia, in 1 organic, 5 senile, 1 primary and 5 secondary dementia, in 1 not insane—72.

Thymus gland present in 2 chronic melancholia, in 7 epileptic insanity—9.

Thyroid gland changes in 1 acute, 1 chronic and 1 agitated melancholia, in 8 chronic mania, in 6 epileptic, 1 circular and 1 toxic insanity, in 1 general paresis, in 2 senile and 1 secondary dementia—23.

Peritonitis in 1 recurrent melancholia, in 4 chronic and 1 recurrent mania, in 1 epileptic and 1 circular insanity, in 2 general paresis, in 2 senile and 2 secondary dementia, in 1 not insane—15.

Hydroperitoneum in 1 chronic melancholia, in 2 chronic and 1 recurrent mania, in 1 toxic insanity, in 1 general paresis, in 1 organic dementia, in 1 not insane—7.

Pyoperitoneum in 1 chronic and 1 recurrent melancholia, in 1 acute, 1 chronic and 1 recurrent mania, in 1 general paresis, in 3 senile and 1 primary dementia—10.

Haemoperitoneum in 2 chronic mania, in 1 circular insanity, in 1 secondary dementia—4.

Perihepatic adhesions in 1 acute, 3 chronic and 1 recurrent melancholia, in 1 acute and 6 chronic mania, in 6 epileptic insanity, in 2 general paresis, in 4 senile and 1 secondary dementia, in 1 not insane—26.

Cirrhosis of the liver in 5 chronic and 1 recurrent melancholia, in 3 acute, 10 chronic and 1 recurrent mania, in 7 epileptic insanity, in 6 general and 1 tabo-paresis, in 1 chronic and 1 senile paranoïa, in 3 organic, 5 senile and 2 secondary dementia—46.

Fatty changes in the liver in 3 acute and 3 chronic melancholia, in 3 acute and 6 chronic mania, in 6 epileptic insanity, in 2 general paresis, in 4 organic and 1 primary dementia—28.

Amyloid liver in 1 chronic melancholia, in 1 acute mania, in 1 primary and 1 secondary dementia—4.

Tuberculosis of the liver in 2 chronic melancholia, in 3 chronic mania, in 1 epileptic insanity, in 1 primary and 1 secondary dementia, and in 1 not insane—9.

Carcinoma of the liver in 2 chronic mania; in 1 epileptic insanity—3.

Syphilitic gumma of the liver in 1 epileptic insanity.

Abscess of the liver in 1 chronic mania.

Cholelithiasis in 2 chronic melancholia, in 1 acute and 6 chronic mania, in 4 epileptic and 1 circular insanity, in 2 general paresis, in 2 senile, 1 primary and 1 secondary dementia—20.

Cholecystitis in 2 chronic mania, in 1 epileptic insanity, in 1 senile paranoïa, in 1 senile dementia—5.

Cicatricial contraction of the gall bladder in 1 chronic melancholia, in 1 chronic mania, in 1 epileptic insanity, in 1 primary dementia—5.

Portal phlebitis in 1 recurrent melancholia.

Splenic changes in 1 acute, 7 chronic and 2 recurrent

melancholia, in 2 acute, 9 chronic and 1 recurrent mania, in 13 epileptic and 1 circular insanity, in 6 general and 1 taboparesis, in 1 senile paranoia, in 2 organic, 2 senile, 1 primary and 3 secondary dementia, in 1 not insane—53.

Tuberculosis of the spleen in 1 chronic melancholia, in 2 chronic mania, in 1 primary and 1 secondary dementia, in 1 not insane—6.

Adrenal changes in 2 chronic melancholia, in 1 acute and 3 chronic mania, in 2 epileptic insanity—8.

Pancreatic changes in 2 chronic melancholia, in 3 chronic mania, in 3 epileptic insanity, in 1 circular insanity, in 1 organic and 1 secondary dementia—11.

Renal changes in 3 acute, 13 chronic, 1 agitated and 3 recurrent melancholia, in 7 acute, 25 chronic and 2 recurrent mania, in 21 epileptic, 2 acute confusional and 1 toxic insanity, in 18 general paresis, in 1 chronic and 1 senile paranoia, in 4 organic, 8 senile, 1 primary and 5 secondary dementia—116.

Ureteral changes in 1 chronic melancholia, in 2 chronic mania, in 3 epileptic, 1 acute confusional and 1 circular insanity, in 5 general paresis, in 1 senile dementia—14.

Bladder changes in 1 chronic melancholia, in 2 chronic mania, in 1 acute confusional and 1 circular insanity, in 6 general paresis, in 1 primary and 1 secondary dementia—13.

Renal calculus in 1 epileptic insanity and in 1 secondary dementia—2.

Prostatic enlargement in 2 acute and 2 chronic melancholia, in 4 chronic mania, in 1 epileptic insanity, in 6 general paresis, in 3 senile and 1 secondary dementia—19.

Urethral stricture in 1 circular insanity.

Testicular changes in 1 chronic mania, in 3 epileptic insanity, in 1 not insane—5.

Ovarian disease in 2 chronic and 1 recurrent melancholia, in 2 acute, 7 chronic and 1 recurrent mania, in 6 epileptic and 1 acute confusional insanity, in 1 general paresis, in 1 senile and 1 secondary dementia—23.

Fallopian tube changes in 1 chronic mania, in 2 epilep-

tic and 1 toxic insanity, in 1 general paresis, in 1 secondary dementia—6.

Uterine disease in 3 chronic, 1 agitated and 1 recurrent melancholia, in 1 acute and 5 chronic mania, in 6 epileptic and 1 acute confusional insanity, in 1 tabo-paresis, in 1 organic and 3 senile dementia—23.

Carcinoma of the tongue in 1 chronic mania.

Erosion of the oesophagus in 1 recurrent melancholia.

Gastric changes in 3 acute, 2 chronic and in 1 recurrent melancholia, in 3 chronic mania, in 7 epileptic and 1 toxic insanity, in 5 general paresis, in 1 chronic and 1 senile paranoia, in 1 secondary dementia—25.

Carcinoma of the stomach in 1 toxic insanity, in 1 chronic and 1 senile paranoia, in 1 epileptic insanity—4.

Adenoma of the stomach in 1 epileptic insanity. Tuberculosis of the stomach in 1 chronic mania. Intestinal changes in 2 acute and 2 chronic melancholia, in 5 chronic mania, in 5 epileptic insanity, in 1 general paresis, in 5 senile and 2 secondary dementia, in 1 not insane—23.

Intestinal gangrene in 2 chronic mania, one due to volvulus, the other due to thrombosis of the superior mesenteric artery. Rectal disease in 1 chronic mania. Appendicular disease in 1 chronic mania, in 4 epileptic insanity, in 1 secondary dementia—6. The stomach occupies a vertical position in 4 cases.

The transverse colon occupied a U shaped position, its lower portion lying in the pelvic cavity in 8 cases. The stomach was extremely contracted in 8 cases. The appendix hung over the pelvic brim in 42 cases. A right inguinal hernia was present in two cases. An accessory spleen in 1 case. Caries of the spine in 1 case. The thorax was barrel-shaped in 5 cases. Primary carcinoma was present in 15 cases distributed as follows: Face 1, tongue 1, thyroid gland 2, breast 2, stomach 4, intestine 1, uterus 2, prostate 2.

The following organs were involved secondarily: Thyroid 1, lungs 3, liver 3, adrenal 2, appendix 1.

Benign tumors were present as follows: Brain or its meninges 3, thyroid gland 5, stomach 1, intestine 1, kidney

1, adrenal 1, uterus 14, ovary 12, subcutaneous 1.

Brain tumor was present in 9 cases, local hemorrhage 1, enchondroma 1, gliosarcoma 1, angiosarcoma 1, glioma 1, mixed celled sarcoma 1, psammonia 1, fibrous 1, syphilitic gumma 1.

The cerebral vessels showed definite structural changes in 70 cases and in 2 of these there was no evidence of vascular disease elsewhere.

The anterior cerebral (left) was occluded in 1 case, the left middle cerebral in 1 case, and the right posterior cerebral in 1 case.

The largest brain was in a case of syphilitic gumma and weighed 1880 grms. The smallest was in a female with general paresis and weighed 880 grms. The average weight of all the brains was about 1290 grms. Two weighed less than 1000 grms., eight between 1000 and 1100 grms., twenty-seven between 1100 and 1200 grms., thirty-eight between 1200 and 1300 grms., thirty-nine between 1300 and 1400 grms., seventeen between 1400 and 1500 grms., seven between 1500 and 1600 grms., three between 1600 and 1700 grms., one over 1700 grms.

In conclusion attention is particularly directed to a few of the conditions which stand out most prominently. These are the pathological alterations involving the bloodvessels, the lungs, the kidneys and the brain coverings. It will be observed that the bloodvessels were involved in 131 cases, or a little over 89%; the pleura in 121 cases, or a trifle over 82%; the kidneys in 116 cases, or nearly 80%; the meninges in 109 cases or nearly 75%; while pulmonary tuberculosis was present in 59 cases or in more than 40%.

To what extent these conditions existed in the patients at the time of admission to the institution is impossible to say, for unfortunately no reports are required of the physical findings, either by the Commission declaring them insane, or at their admission, consequently there is no way of ascertaining what was or was not present, nor are there any definite reports of the development of the conditions existing, or of the course they have taken. Yet the fact that these

conditions are present so frequently is highly suggestive, and indicates to some extent the directions in which future investigations should be carried, and also the line of treatment to be followed. That one or more of these conditions were present prior to the onset of the psychical manifestations is quite probable, and no doubt were a factor in producing them. This being true, it naturally follows that in the treatment of those cases it will prove the more beneficial the earlier it is given, and this comes mostly within the sphere of the general practitioner. He, as a rule, is the one first consulted in regard to the development of these conditions in their incipency, consequently the necessity of a thorough conception of them by him, is only too apparent.

The frequency and extent of a diseased state of the bloodvessels indicates the necessity of paying closer and more careful attention to the condition of the vascular system under all conditions which come under the supervision of the medical man. Much investigation is being carried on along this line in an endeavor to ascertain the actual cause or causes which are instrumental in producing the structural alterations in the anatomical formation of the vascular walls, and as a consequence a modification of their physiological functions. How much of these structural alterations or modifications in function is due to the circulation through them of an impure, toxic, irritating blood stream; how much is due to an interference with or modification of the nutritive supply either in regard to quality or quantity; or how much is due to their being subjected to an excessive degree of strain or tension by a heightened intravascular pressure, is difficult to say, but it is quite probable that one or all may exert some influence. Dr. Barr of the University of Liverpool, England, in discussing the condition of arterio-sclerosis, makes the statement that renal changes are only a part of the general vascular disease, and looks upon the vascular changes as due, in a great measure, to the increased blood pressure produced by an increase of the peripheral resistance. The constant strain upon the vessel-wall leading to degenerative or proliferative changes either of which interfere with the elasticity

or tonicity, and so the calibre of the vessel, the flow of blood through it, and the blood supply to the parts beyond. If their structural alterations be due to this increased pressure, there are remedial measures at our command to regulate it, and should enable one to prevent its development, or to inhibit its progress when its presence is found to exist. It is only necessary to refer to two remedies, products of glandular structure, which seem to have a more or less direct influence upon the vascular walls, namely, adrenalin and thyroidin, the former exerting a contractile influence upon the arterioles, the latter a dilating one. But these are by no means the only ones, and if it be determined that a regulation of the intravascular pressure will control the extent and degree of the structural alterations in the vascular walls, many other remedies may be utilized. When once a structural alteration has taken place, no form of medication can displace the diseased conditions with a normal structure and under such conditions the only hope lies in preventing further progress. When one considers the frequency of the condition, and that it is to some extent not only a preventable diseased condition, but also one that can in a measure be inhibited, it is a question deserving of serious consideration and investigation.

The frequency of renal implication indicates the necessity of making thorough examinations of the urinary secretion, and of giving attention to the function of the kidneys when abnormal conditions are found, since this is the channel by which so much of the noxious products of metabolism is thrown off by the body. What may be the relations between the renal and cardio-vascular changes, whether the vascular system or the renal organs are the first to undergo an alteration in structure and function, has yet to be solved by future investigations, as must also the actual conditions leading to or causing those changes. Whether it be due to improper exposure of the general sensorial surface of the body to unhealthy and unsanitary conditions; to the respiration of an atmosphere obnoxious, insufficiently and improperly ventilated; to the ingestion of unwholesome and improper food; or to inattention to and carelessness in following and

obeying the laws of nature, it is difficult to say; but it is probable that one or more of these conditions take part in producing some alterations in the normal processes of metabolism, resulting in the formation of either an excess of the normal products, or some new substances, or in an interference with their excretion, either of which will exercise an injurious action upon the bloodvessels through which they circulate, or upon the tissues which receive their nourishment from the blood and lymph containing such products, or upon the cells of the organ whose function it is to excrete them.

The frequency of structural changes in the meninges of the brain and of the cerebro-spinal fluid is another prominent feature. The state of the vascular system, not only in general but more particularly, locally, is probably the most important etiological factor taking a part in the causation of these changes. The increased secretion of, or the interference with the circulation of the cerebro-spinal fluid is probably also of importance. The influence of the circulation of the blood through the central nervous system upon the circulation of the cerebro-spinal fluid, and vice versa, and the effect of such influences upon the metabolic processes and the physiological or pathological functions resulting therefrom opens up a wide and interesting field of investigation. This is to a slight degree indicated by the importance and interest attached to the process of lumbar puncture, not only as a diagnostic procedure, but also as a therapeutic measure or channel for medicinal therapeutics.

The frequency of tuberculosis is also of supreme importance. It will be noticed that it leads the list amongst the causes of death. Since it is not only a preventable but also a curable disease, its curability being indicated by the frequency with which one finds foci of softening which have become infiltrated with calcareous matter, or walled in by a dense fibrous capsule, or contracted into a cicatricial mass of fibrous tissue, it is a question of serious import, not only to the public in general, but more particularly so to those connected with institutions of various kinds, especially those who care for the sick and the afflicted who are not able or

capable of caring for themselves. While there is no doubt that some are affected with this disease prior to their admission, many contract it afterward. It is not necessary to point out the danger there is in being exposed to the exhalations and excretions of a tubercular individual to even a healthy person, but how much more dangerous does it become to one exposed, whose vitality is already lowered and weakened, whose vital forces are already engaged in mortal combat with devitalizing agencies, and who are rendered unable or incapable of taking such precautions as may lie within the reach of those more fortunately situated. Too rigid measures can not be instituted or promulgated that will lead to a lessening of that great, world-wide scourge which destroys so many human lives, and causes so much suffering, distress and sorrow. If a suggestion might be given to those who are endeavoring to procure legislation along this line that would probably aid them in their efforts, it would be to make a collection of pathological conditions illustrating, in reality, the destructive action of this disease upon any and every organ and tissue of the body in all its phases, from its earliest inception to complete dissolution. Probably no more forcible power of persuasion could be found, indicating the necessity to do whatever is possible to combat its ravages, unless it be the death knell of one near and dear to them.

AILOUROPHOBIA AS A SYMPTOM OF PSYCHASTHENIA.

BY C. H. HUGHES, M. D.

ST. LOUIS.

AILOUROPHOBIACS have generally been noted as psychics, uniques showing unaccountable aversion for domestic cats, not because of any previous disagreeable or frightful experience with them or for any other rational cause. A fear of wild cats, like the fear of the entire feline tribe in their wild state, is not included in this dissertation. In some instances the aversion is a superstitious dread, often hereditary. It was said in the dispatches of the associated press last fall, that the Kaiser of Germany had such an aversion to cats, that at the time of his last visit to England, Windsor Castle was kept clear of its feline tenants till after the emperor's departure.

Ailourophobia is no respecter of persons. A crown cabinet officer, high in the counsels of King Edward, is said also to have the same morbid aversion to domestic cats.

This fear is not ordinarily a good sign of mental tone and vigor for action, especially if coupled with other psychasthenic phobias and we hope the remark will not provoke the charge among our German colleagues of lese majeste. The morbid dread that some people have of travelling, the fear of being in a moving carriage or railway (amaxophobia), constant dread of death when travelling or when reminded of it by a passing funeral or sudden news of fatal calamity anywhere (thanatophobia) is a psychasthenic symptom.

Often this peculiar fear of felines appears inbred in the cerebro-mental fiber of the individual as a part of his personality as we know him. But one can not be sure that it is

not more often a symptom of states of chronic, alternating, latent and reappearing psychasthenia in many persons, like the other dread symptomatology of psycho-nervous debility.

I have known of at least two well marked instances of amaxophobia originating in the fright of being run away with and the effect of the shock abiding with them throughout the after life, with more or less of neurasthenia and unconquerable aversion to riding, the one fearing to ride in an open buggy, the other in a barouche.

But the case I now briefly record is that of a markedly ametrophic married lady, mother of one child, who consulted me ten years ago for neurasthenia in psychic form and received treatment therefor, from that time to within a couple of years, the latter time being spent in the country in a manner congenial to her, so that she has improved markedly in health and flesh. And remarkable to relate, the ailourophobia, which dominated her so that she could not bear the presence or sight or sound of a cat, has completely disappeared with the recovery of her nerve center health.

So complete has been the remarkable disappearance of this singular symptom that she now fondles and caresses and herself often feeds a cat which she calls her own by a pet name and keeps about her house. This is the first and only instance I have ever seen of the disappearance of this peculiar symptom uncomplicated in psychasthenia and I do not remember reading of a similar recovery in the literature of psychiatry, though I have seen all the other phobias of neurotic adynamia pass from the mind with the recovery of the patient.

This patient's trouble resulted from long continued brain-strain, beginning with persistent and too early in life overtax at the piano and domestic care beyond her years.

She showed nothing else worthy of special note beyond what is given in the text. She menstruated regularly, was thirty-two years old, of medium height and fair flesh when under treatment—some headaches—no hysteria.

Benjamin Rush, the first American Alienist and Neurologist, in the early part of the nineteenth century recognized this, in his classification of unreasonable (morbid) fears,

including it with the "fear of thunder, darkness, ghosts, public speaking, sailing, riding (amaxophobia) certain animals, among which he enumerated 'particularly cats, rats, insects' and the like."

It is the fear of the harmless familiar domestic "necessary" cat that makes ailourophobia a significant symptom. Fear of the uglier and more repulsive looking civet cat, notwithstanding the agreeableness of the perfume it emits in the estimation of some, would not be so symptomatically significant, nor would the fear of that other carnivorous member of this group of the ailourodea—the hyena; anyone might be expected to fear the latter outside of a menagerie or if not behind bars.

I have never seen a case of ailourophobia associated with homosexuality. But Krafft-Ebing's case number 121 with a very neuropathic heredity, and extreme sexual perversion, who became also an opium and later a cocaine habitué, was, as a child, so "nervous" that "the mewing of a cat would create great fear in him, and if one but imitated the voice of a cat, he would cry bitterly and run to others for protection." Slight physical disturbance caused him violent "fever." He was a quiet, dreamy child of excitable imagination, but of slight mental capabilities. This ailourophobia was evidently only a part of his general nervousness in childhood. The fear of cats does not appear to have persisted with him to adult life.

He grew into a fairly healthy manhood and became the physician whose remarkable biography and perverted relations to others of his morbid class is detailed in *Psychopathia Sexualis* at some length.

This case of Kraft-Ebing's might be regarded as a recovery from ailourophobia also for he recovered of this fear with the improvement in his nervous health.

THE MILWAUKEE MORBID KLEPTOPHILE.

BY THE EDITOR.

THE millionaire wife of Charles J. Romadka engaging as a nurse or domestic in different Milwaukee families for the purpose of stealing jewelry, money, costly robes, etc., under the suggestion and tutelage of a white and black crook who would dispose of her stealings, her career ending in arrest and abject confession, is so much out of harmony with her normal life, conduct, station and environment, although she was convicted and sentenced, as to suggest the kleptomaniac phase of prodromal grave insanity. Brain rest and the regulated life of a penal institution together with the profound impression of arrest, imprisonment and sentence (for these are sometimes the creatures of real incipient mental disease, as well as of depravity, if accompanied with great loss of sleep) may avert a confirmed condition of insanity, apparently imminent in her case. Such bizarre and motiveless conduct on the part of one in her social and financial position, consorting with white and negro thieves, going out to domestic service to steal, leaving her place of employment immediately after committing a theft and engaging in another and the whole ending in an idiotically naive confession, certainly suggest that sort of mental unbalance that often precedes mental outbreak.

In this idiotically naive confession, Mrs. Romadka seems morbidly oblivious of its real tenor as affecting her life and character. She seems to show an obliviousness to the gross immorality and impropriety of her escapade out of normal harmony with her social life and environment suggestive of

that imbecility which presages oncoming dementia praecox or other mental disease.

Her psychical blindness to the certainty of being detected and punished for her thefts, is also confirmatory of the fact that cerebropsychic morbidity underlies her otherwise inexplicable conduct. Here is a part of this silly psychopath's confession, sufficient to show an illy-balanced state of mind, though not enough to establish in the popular mind or even in the mind of a real alienist expert, the conviction of established insanity.

In her confession Mrs. Romadka said that her first theft was committed in April, 1907.

"I saw an advertisement in a paper," she said, "for a trained nurse. I went to the home of Mrs. David Pfaelzer, 4514 Forrestville avenue, and secured the position. I stayed there about a day and a half, stealing a diamond ring, a diamond bracelet and a silver card case."

After detailing several other similar experiences, sometimes securing positions in families in one capacity or another through advertisements, sometimes deliberately walking in where she found a door standing open, securing in each case a few pieces of jewelry, Mrs. Romadka continued:

"Then I went to Milwaukee to my home for a time and succeeded in stealing a sealskin coat from Mrs. Cady at 186 Eighteenth street. I shipped the coat to Jones and he sold it for \$18. I found out how easy it was to steal while I was in Milwaukee before coming to Chicago. I got a job as nurse girl, and one day while the woman was out I noticed that she left her jewelry on her dressing table. This gave me the idea that I could get positions and steal jewelry just as easily as not. I came to Chicago last April. I met Jones in a place on Wabash avenue, and he told me later how to do the job.

There ought to be places for such midway in function between the moral reformatory and the lunatic asylum, where such unfortunates could be placed under reasonable restraint, psychological observation and treatment. They should be brought into a state of good physical health,

with the right amount of sleep and food secured to them, and then judged for further punishment or treatment.

To the eye and mind of an alienist, a married white woman leaving her husband and a home of comfort and plenty, even lavishly furnished, enough to satisfy the most exacting luxurious taste and going to a city other than her home, to consort with thieves regardless of color, inspired to the rash course, according to her pitiable confession, by suggestion of newspaper stories of crime herself free of other crimes or immoralities and hitherto not given to such conduct, shows a change of conduct, a departure from the natural habits of thought, feeling or action strongly suggestive of, and such as Andrew Combs would designate, insanity.

There may be something in the former life of this woman concealed from publication in court to mark her a criminal, but all that appears of record points to the prodromata of insanity. She should have had the benefit of the doubt and been placed under alienistic observation and under charitable psychiatric care.

A deeper search into cases like these must reveal either criminality with a marked element of organic folly (imbecility) or more confirmatory signs of latent prodromal insanity.

It is not surprising that this unfortunate woman's story, told in tears to the judge and prosecutor, should have made a marked and sympathetic impression and secured an indeterminate sentence of from one to twenty years, or that newspaper reporters could find no other explanation than that this rich trunk manufacturer's wife should have stolen, and made intimates of the degraded immoral creatures she consorted with in so reckless a fashion that escape of detection was impossible, merely for amusement and from suggestion of similar crime in the public life of others. A little deeper psychology might have suggested to the latter another possible explanation. A broader psychological knowledge would be of signal service to the press corps reportorial in regard to such cases.

DEMENTIA SENILIS AND OPINION EVIDENCE.*

BY C. H. HUGHES, M. D.,

ST. LOUIS.

A BRAIN disease disordering the mind criterion of insanity has been insisted upon by alienists and neurologists ever since the famous trial of Hadfield for shooting at the British King in Drury Lane Theatre. It was when Lord Erskine a century past, made his famous analysis of insanity and compared it with sanity. This test was included in the judge's charge in the Bradley trial last December, but was neither established by either experts' nor lay testimony nor regarded by the jury. Mrs. Bradley was acquitted mainly because the party on trial was a woman and the victim was a man and not a very good one, though the woman was not proven to have been perfect either. The verdict was sentimental. The insanity plea was used here as in so many other instances of late to veil the "unwritten law" so called—the paramount law of justifiable erotism now so popular.

Expert opinion medical testimony is denounced by the press often too unreasonably, because lawyers in submitting briefs to medical men, too frequently give one-sided specious pleas, to which incautious doctors become committed and give opinions thereon which they afterward undertake to defend, whereas the expert should insist on having all the testimony before deciding.

The doctor should have his fee for his opinion before being called into court and then not take the stand unless the testimony will sustain his conclusion for or against cerebro-mental disease.

*This is the continuance of the Analysis of the Mistaken Dementia Senilis Diagnosis recorded on pages 464 to 480 of last November number.

Alienist experts ought not to go on the stand unless assured beyond all doubt that the testimony will sustain their opinion. A conclusion of sanity or insanity to the medical expert is a matter of scientific fact, though based upon an hypothesis. If the hypothetical case presented in court does not sustain the conclusion based on the hypothesis given him before the trial he should say so when on the witness stand under oath and let the cause of the lawyer who has deceived him suffer accordingly.

In this case the witness' opinion was given as it has ever been his rule in all other similar cases, upon the statements of the attorneys as to the facts they submitted, his opinion given and fee paid. The service on the witness stand were not for opinion, but for time required for delivering the testimony. The brain disease deranging the mind criterion, so diseased as to place the mind out of normal harmony with the natural character and surroundings of the individual, out of natural and usual accord with his normal life in thought, action and purpose, was the test applied to the facts set forth in the hypothetical biography and it was found that all the facts and circumstances were in normal conformity thereto. The man, Johnson, described in the hypothetical record (Vol. XXVIII, No. IV, pp. 464-480) was therefore found not to be insane. He had the habit of swearing in a manner shocking to non-profane ears, but this was his natural habit, early acquired when residing among profanely speaking men. He was naturally a passionate, willful and strong-minded man and continued so throughout a long life, not entirely abandoning the swearing habit even in his final and fatal dementia. He kept liquor in his cellar and drank moderately, but not to recognized inebriety. He was remarkably and exemplarily temperate for a man who drank at all. He displayed no insane temperament in his drinking, one of the proofs according to Maudsley especially and my own personal observation, of his sanity of mind, was never recognized as an inebriate throughout a long life by most intimate acquaintances, was never accounted a drunkard by any of his friends. He was not regarded an intemperate

man with liquor by any one who knew him either intimately or slightly.

He had a strong aversion toward his divorced wife and her family, the Rapellees, not from disease disordering the brain, but from external influences and adequate cause, and the love he had for his daughter had cooled and changed for proper cause, but his normal paternal instinctive regard for her remained, as shown in his healthy, fair and comfortable provision for her while he lived and in wisely devising for the future continuance of that same reasonable and secure maintenance for her after his death. He was grieved and not so affectionate toward his daughter, not from disease of brain, but for cause operating on his mind in her speech, writing and conduct. She, took sides with her mother after the divorce. He was properly provident of her welfare, however, and mindful of his paternal duty toward her both before and after his death. He had right reason, such as a healthy mind would have, for not making excessive bequests to her. These reasons were in rational conformity to his desire not to let the Rapellees get the benefit of his property, because he did not desire it to go to them, and because he had a rational and not morbid dislike toward them, even though the dislike may not have been always the most reasonable. It was not a brain disease-engendered dislike, and therefore was not an insane antipathy.

It was apparent also in the will that he did not consider his daughter prudent enough to hold property he might leave to her and so he entailed it in a business like and rational manner, and his duty was performed toward her as he considered his duty and she was safely and well and rationally provided for in a manner incompatible with dementia. Such a will of rational design could not emanate from a demented brain and mind.

He wrote the will himself. Dementia does not write documents of the kind that are accepted for probate. Other forms of insanity might and have made lawful bequests, but not dementia senilis. He signed it as legibly as he wrote

it, wrote it connectedly and clearly and rationally in every way and signed and acknowledged it rationally.

Born in 1825 he met with a serious accident forty-five years thereafter (1870), which seriously injured one of his hips, the lower part of body and limbs, confining him to his bed for about four months; the injury was painful and gave him much pain for several years after, but caused at the time, neither delirium nor unconsciousness, for he called for help so loudly within an hour or thereabouts, as to be heard half a mile away, bringing rescue. It was twenty-five years after this accident in 1870 that he made his last will, about two years later he made the final codicil July, 1897, at the age of seventy-two. About nine years thereafter, at the age of eighty-one, he died of senile dementia.

In 1897, a little before the final codicil to his will was made, he declared to a friend that "he was going to fix things so that after he was dead and gone he would control his property and the damned lawyers would not get any of it," and he did, as the sequel of this trial, sustaining his will bequeathing the bulk of his property to La Harpe for school purposes confirms, though his daughter was provided with a living, such as he had given her during his life and intended in his lifetime to provide for her after his death, which provision he made as intended, neither forgetting nor neglecting his purpose. There is no evidence of demented memory failure. No amnesia of intention nor execution.

His injury about thirty-six years before his death gave him more or less annoyance and pain during his life, but did not prevent him doing business, making loans, collecting interest, making his own contracts, keeping his own accounts, writing a good legible hand, having good business ideas, above the average, reading much, keeping posted as to current events, politics, religion, history, playing chess, acting economically and temperately, though positive in his opinions up to within a year or two of his death. He had not up to this time passed into that serene and passive period of extreme but yet sane old age which the great alienist, Isaac

Ray,* in his description, copying from the great Bichat, cautioned against mistaking as insanity.

"Seated and concentrated within himself, * * * a stranger to everything without him, he passes his days there deprived of desire, of passion, and sensation; speaking little, because he is determined by nothing to break his silence, yet happy in feeling that he still exists, when most every other sentiment is gone."

This man had not the deafness that so often accompanies old age, disabling the individual from hearing or participating in the conversation of others, nor the "countenance of dullness and stupidity" so common to advanced age where no dementia exists and "which might easily lead one not particularly acquainted with him, while in fact he needs only to be properly addressed to display a mind which has not yet ceased to think with some degree of accuracy and vigor. The latter fact, however, will be known only to intimate friends, while the former (the apparent stupidity and dullness) is conveyed to the mass of common observers who are ever ready to decide upon a person's mentality from an occasional glimpse of his manner," etc.

One is "seldom required to decide questions of more delicacy" demanding "such nice and cautious balancing of evidence, such penetrating into motives and biases, such profound knowledge of the mental manifestations as affected by disease" as that of deciding between normal and natural old age without mental disease, and that condition of disease which transforms the normally minded octogenarian or nonogenarian into the morbid mental state of dementia senilis.

The man whose mind we are judging from his life history was not only not "sans eyes, sans teeth, sans everything" as pertain to extreme old age, he was not only fairly free from deafness and the tremors of great age and without the feeble knees that smite together or hands that have forgot their cunning, feeble-mindedness and listlessness when the will and codicil were drawn, but he was exceptionally active, younger than such years as his ordinarily warrant, for even

*Jurisprudence of Insanity; and Bichat, *Sur le Vie et le Mort*.

two-thirds of a decade after. He was in fact not an extremely old man when the will was made in 1895, only seventy; or the codicil in 1897, only seventy-two.

His life thereafter, within a year or two of his death, is one of accurate business activity generally testified to as correct and a letter was in evidence in his own handwriting, with few errors of construction or of omission, written a year or so before his final illness, expressing a proper and rational appreciation of the fact that he was getting too old for business, that he had reached the time of life when he needed more rest and should not have business cares and declining to enter into any further business transactions for that reason.

This letter itself was the most positive and complete evidence of his health of mind and of his judgment of himself in relation to the growing infirmities of old age, to his right relation to his age and environment and to the rational life expectancy of a man of his advanced and advancing age and the will itself was an autodiagnosis of his sanity.

There were no marked evidences of age amnesia in this case. His memory was not so good as it used to be and he was sane enough to know it and to admit it and to keep a memorandum. There was no evidence that he forgot his often met friends or his family. He did not forget the Rapellees family or fail to provide properly for his last wife nor his daughter, nor did he forget the name of either, though he usually called his daughter "my child" and addressed her as such orally while he used her name properly in writing. He would "burn his money and die happy rather than that the Rapellees should get it" and he remembered to fix his estate years after so that they could not get it. There was no amnesia of dementia senilis in this threat and its execution. He did not forget that his daughter was his child or that she was the only child he had. He was troubled about the disposition of his property as already noted, but got over the trouble by a rational and philanthropic mind satisfying disposal of it. The retributory

provision in the will as to the Rapellees is an evidence of sanity and any thing but dementia. The essence of senile dementia is not memory and vengeance but the contrary.

The condition of the life interest bequest of a quarter section of land, improved and stocked, as stated in the hypothetical question, carry out his intentions expressed when there was not and could not be a question as to his sanity.

To understand this case from the standpoint of sanity, we have only to keep in mind that Johnson was in his lifetime willful and determined, tenacious and vengeful, as is not uncommon with men of his kind, self-made, accustomed to meeting and over-coming obstacles, to meeting men and having his way with them.

He had accumulated wealth and knowledge above the average of those about him and was by nature irascible and domineering and violent. Independent in disposition even to the extent of disregarding the proprieties of speech and conduct at times, especially in regard to swearing and especially the stamping incident and the invocation to Jehovah, God Almighty, etc., and his calling himself a damned fool at the time of the ditch incident. Irascibility and profanity are not insanity, though they may coexist with it. But such violences are not markedly characteristic of dementia senilis. His symptoms when he had his last brain illness were rather maniacal than those of dementia.

Indiscreet displays of temper and speech such as were manifest on that bad night when visiting members of his family were called God damned fools to go out on such a night are not dementia. He did not speak to his daughter-in-law in words as gentle and sweet in tone as those which Jessica near the bridge of such a night that was different, but his expressions were far from the utterances of a dement. He might have expressed himself differently as his daughter-in-law reminded him he should, but there was no insanity in thus forcefully expressing his judgment in his own peculiar way. It was not very nice for him to show his stepdaughter the door after she had told him he had said enough, but that was his

way as a passionate man, worked up to the swearing stage of anger, a stage easy to reach and natural. He was an automatic swearer, but such are not necessarily insane. To give suspicion of insanity, oaths must be at variance with the natural character and due to disease of brain. The daughter-in-law did not act more rational than he in going out to a neighbors and staying all night, when she might have left him and gone to bed to her room upstairs. Unreasonable passion impelled acts are not insanity. Acts of passion must be out of harmony with the individual's natural character, not a part of his individuality to justify supposition of insanity. Swearing was a natural part of Johnson's personal character not due to disease of brain.

Changing one's mind for cause as in the watch present to his daughter incident is not a sign of insanity. And such an act or thought might militate against the presumption of dementia, for it would indicate more correct reasoning power than belongs to this state of mind so like amentia in its profounder phases. The church incident was also reasonable to a sane mind of his kind, the unhitching of the hearse, the profanity in church when the people persisted in hitching to and breaking his fences when he had placed hitching posts for them; the loosing of the horses attached to the empty hearse, when it was tied against his remonstrances to his fence, and all the other so-called insane acts and speeches of his including the buggy whip and daughter Clara and Miss Green incident, his views against co-education were in harmony with his natural character and consistent with sanity, though they might indicate insanity and be found to depend upon disease of the brain and be strikingly at variance with the natural character of another person. Such incidents are episodes in the lives of passionate, positive, autocratic, independently thinking men but not in the character of demented. The meatshop matter of lapse of memory as having paid for his meat and offering to pay twice for it two days after, may have simply been the amnesia of abstraction or of brain tire, for it was not a common state of memory with him. Besides, when he bought the meat, four days before, he

did not at that time pay for it and remembered that he owed the bill and paid it two days after. He only forgot that he had paid for the meat. Retentiveness of memory depends on force of impression on the memory centers of the brain, due often as much to attention as on ability to recall facts brought before the mind. Neither it nor the Barr incident of passionate outburst or brain storm, is significant of dementia. Absent-mindedness, treacherous memory and towering passion, are manifest in the sanest of minds at times. They constitute the individuality or personality of some persons. There is one incident that must not be passed. With advancing age the fountains of feeling and passion dry. An active normal though unreasonable passion is rather indicative of mental power rather than the brain force loss of advanced dementia senilis, so especially is activity of the memory and emotions.

Lapses of memory, as in the Dr. Barr's father's incident, are common to aged people with good minds, when the facts have been long out of the mind and nothing recently occurring to recall them. Dr. Barr's father died in 1878. It was not especially strange that in a hurried street conversation in 1894, the old man should not have recalled the fact at once or that he should have asked about Dr. Barr's father a second time in about ten minutes. Johnson may have been mentally abstracted, a common state of old men's minds, and may not have caught the answer. This memory failure was not an habitual state with Johnson.

Johnson's memory of his only child and his provision for her life support indicates mental vigor instead of dementia, his memory of his wrongs at the hands of his divorced wife, and his provision for his widow confirms it and the tender feelings he displayed in weeping, when provision for his child was referred to, indicated that the fountains of affection had not dried up with age and that the vigor of his mind had not become so impaired by mental disease as to render him oblivious to the rational demands of duty or the emotions of normal affection.

Johnson was a sane old man, free from mind deranging

brain disease at the time of making his will. The will was in harmony with all the circumstances of his normal life, character and relations to environment.

The purpose of his life was normal and his life was mainly in harmony therewith. He was law-abiding. He did nothing purposely against the state, as a good and upright citizen, though he spoke with overmuch profanity and sometimes inopportunately. That he was "rude of speech" it must be conceded, but he was humane and kind and provident of himself and those dependent upon him. He was quite as good to others as to himself and aimed to be just, though sometimes considered exacting and erratic. He was sane with it all.*

*Further consideration of this subject may be looked for in the next issue of the *Alienist and Neurologist*.

INADEQUATE PRECAUTIONS CONCERNING THE INSANE.

A Too Common Mistake Regarding Them.

BY C. H. HUGHES, M. D.,
ST. LOUIS.

A POPULAR error in the management of insanity is illustrated in the following recorded lack of vigilance and expert treatment and management of a paroxysmally murderous maniac, sent back by court authority to the family he had attempted to kill and to the environment in which his insanity developed.

The mistake is in placing the unfortunate lunatic again under the mental influences that contributed to develop his mania. The last place for the cure of such a person is the home in which his insanity developed and the most hurtful of all nurses for such a case is the daughter or wife or other relative toward whom a delusion to murder has once developed.

Public conception of insanity and its right care is yet much awry in many quarters. Following is the sympathetic psychically unscientific record of the mistaken attempt at care of this insane man, who has passed the prime of life in his insanity, will probably, in a recurring paroxysm be more successful in accomplishing the "glorious end" of life for himself and his delusional desires with covetous insane passion.

We should expect this form of mental disease with its peculiar unskilled, unwise treatment, unless fortuitously

averted by some intercurrent fatal disease, to result in another attempt, if not successful murder.

"The devotion of a young daughter for a crazed father," the record says "probably averted a double tragedy and was the means of Albert Drda of Edwardsville being given a chance to regain his mental faculties after a frenzied attack on his family, with the faithful daughter as the volunteer nurse."

Mamie Drda, a bright, well-developed girl of 14 years, is the heroine of her family and neighbors, because of the courage which she exhibited when the father, whom the girl loves deeply, became insane and made all preparations for a "glorious end" which he was determined she should share.

The girl's pleas and promises to take care of her father won the promise that he could be removed from the hospital division of the Marison County Jail, where he was taken after he had terrorized the neighborhood with a formidable array of weapons, including two revolvers, a shotgun, a rifle and a butcher knife. Mrs. Drda and the two smaller children, Albert, aged 11, and little Stella, aged 7, sought refuge with Martin Drda, a brother.

"I did not think that I might be in danger with papa," Mamie told a *Post-Dispatch* reporter after her night of terror. "I only thought of staying with papa to keep him from killing himself, as I believe he intended to do.

"Papa and I have been together generally always, and I stayed because I knew he needed me most of all when he did not know what he was doing.

"I hid the guns where he could not get them and I put my arms around his neck and told him we didn't want to die and that no one was trying to kill him. He told me all the time that he was going to die and he wanted me to share the glorious end.

"While we were driving in the buggy I did not talk to him very much because I thought he would be better to be quiet. I stayed with him every minute and when the men came late in the night to take him away he and I were in the house alone and so I went to Edwardsville with him.

They took me to the Leland Hotel and promised me that papa would be taken care of."

Mamie Drda has been a constant companion of her father, she says, and has helped with the work about the farm.

"Papa thought I could help him better than a man," the girl said proudly. "I have helped him work in the fields. We have generally always been together."

This courageous slip of a girl, the pride of her grateful mother and admiring friends, pleaded that her father should be given another trial to overcome the insanity which has rendered the loving husband and father a menace to the lives of his family.

"We never had any trouble at home," Mrs. Drda said. "My husband was always good to me and the children, but he has been worried about some business lately and suddenly he became violent, threatening us with all the weapons he could find. Mamie was the only one he clung to. She did not think of danger to herself, but stayed with her father and prevented harm coming to any one of us."

Mamie is about five feet three inches tall, weighs about one hundred and twenty pounds and wears dresses slightly above her shoe tops. Her eyes are very dark, fringed with jet black lashes. Her brows are heavy and black and her hair is black and fluffy. She has a girlish dignity and is a refined little woman when she talks of the responsibility she feels for her father in his affliction.

Jailer Hogan, who headed the posse which took the man captive, made arrangements for Drda to be returned to his home Tuesday after a physician had pronounced the patient sufficiently recovered to be given over to the care of the family.

Sympathy, though essential to the welfare of the insane, is not science in the management of insanity, unless guided by the hand and mind of psychiatric experience. It is not the science of psychiatry, though it is, if rightly applied, an essential appanage thereof. The insane must be sympathetically cared for in correct courses and channels of

consideration for their comfort, diversion, rest, recreation, rebuilding and general welfare of body and brain, but not in the line of keeping alive their delusions or of exciting new ones in their minds. When the machinery of the mind goes wrong something more than the judgment of a child or the skill of a novice in psychiatry is needed for its right control. It is a popular error that the apparently harmless insane person is safe to himself or others to be at large and without the regulation treatment his disordered brain requires.

The end of this case may be tragic, yet without proper commitment and prolonged treatment. The fulminations of mental disease often occur unexpectedly. This man's family is not safe with him at home. The judgment of an inexperienced non - alienist physician as to non-recurrence and safety of fulminating homicidal mania should not influence courts to set such unsafe insane persons free upon the community. Non-expert self-asserted alienist opinion is given too much credence in American courts on matters of insanity.

It was a man like this (one of the Montesque brothers), from France, who had been insane and was lodging as a tourist at the old Barnum's City Hotel in the forties, in St. Louis, that furnished one of the most startling of tragedies. Montesque, having delusions of suspicion, left his room in the night and shot Barnum dead, while Barnum was in his own bed asleep.

Montesque was acquitted as insane and taken back by his brother to an asylum for the insane in France.

MEDICAL RANK AND COMMAND IN THE NAVY.

BY C. H. HUGHES, M. D.,

Formerly Major and Surgeon of Volunteers, Member of the
Loyal Legion, Associate Member of Society of Military
Surgeons, Ex-Surgeon of Barracks and Post
Hospitals, etc., etc.

ST. LOUIS.

THE sudden action of the Chief of the Bureau of Navigation, Rear Admiral Brownson, in resigning because of a conflict of opinion as to the rank and place of the medical staff of the navy, inspires this brief article of support of the President and Surgeon General Rixey.

Why should a sailing master outrank the chief surgeon of a hospital ship? The hospital ship should go or stop when and where and land or depart when and where the surgeon deems best for the good of his men and the service. The sailing master should be as much under the chief surgeon, on such a ship, as the other medical subordinates are. Let the service get used to this.

The President rejected the recommendation of the admiral as to the officering of the hospital ship *Relief* and instead accepted those of Dr. Rixey, Surgeon General of the Navy, a very proper act on the part of the President, we think.

In medical matters in army or navy, medical authority should be supreme and rank so bestowed as to command supreme respect and obedience in the sphere of sanitation.

When it was decided that the hospital ship *Relief* should go with the battleships, a question arose as to who should command her. Rixey wanted Stokes, a surgeon with the rank of lieutenant commander, to be the ranking

officer of the ship. Rear Admiral Brownson, as head of the Bureau of Navigation, declared against this recommendation. He said that if a surgeon was put in charge of a ship he would necessarily have to have a sailing master, that to have a sailing master would require an officer from the line of such seamanship and ability as a navigator that he should outrank the surgeon on the ship.

This is the old dispute as to proper rank and service to the medical staff. If medical rank and service are degraded in the navy or army their efficiency is impaired. They must have rank and be respected accordingly. Hospital and medical relief ships and isolation ships for infected seamen should be in command of an officer of the medical corps and be obeyed and respected accordingly. There are circumstances in naval warfare where the surgeon-in-chief might have a fleet of ships and the rank of admiral himself, and there is no impertinence in this suggestion as was said by a daily paper in St. Louis of Dr. C. A. L. Reed's defense of the President and Dr. Rixey. Sanitation and the prompt saving of men amounts to much in fighting power nowadays, and those engaged in this efficient work should be regarded and ranked as peers with the rest of the navy staff. It is not long since an attempt was made to have certain low grade navy medical officers rank and mess as non-commissioned officers.

To secure for the American Navy high-minded and highly capable men in its medical corps, the latter must be rightly appreciated, encouraged and treated. The American Navy needs the best medical talent and sanitary executive ability to be had. The care and efficiency of the men behind the guns and the man who commands a gun on an American Man of War, has a right to the best health and strength sanitary science and service can give. Nerve-tone, muscle-tone and fighting power depend as much on healthy sanitary condition of action as on armor and weight of guns. As the armor should be of right quality, rightly placed, so should the officers and men be kept rightly conditioned for effective action by right medical management of men and quarters.

The salvage and power of science should be applied to men as well as to truck, machinery, magazines, guns or turrets and this service should be appreciated accordingly if our navy is to be made invincible to the world. The day of the power of the real doctor dawns over the affairs of men and he cannot be separated from them nor lightly regarded.

Give the medical arm of the navy and land service the rank due to it and navy surgeons will not be disrespectfully dubbed by the marines as "Bones," as Rear Admiral Brownson says they are, and medical matters and needed sanitary matters will have the prominence they deserve, more than they got, for the good of the service in the late Spanish-American war. Wise and skillful medical service was once pronounced as outranking armies for the public weal.

The medical arm of the service is equal to armament on the sea in the force it may secure to officers and men and the epidemic and plague dangers it may avert at critical times.

There is no estimating the loss a naval force might experience without right medical service at certain times. Nothing is lost to an army or navy that rightly appreciates, encourages and honors its medical corps.

Rear Admiral Brownson's view may be in accordance with his conception of nautical precedent, but it is naughty and unfair all the same and the time and the hour is come for making a new precedent in the line of right and just recognition of medical men in the navy.

The president has been censured as "Medicine Mad" on this subject. If he is, we hope his insanity is incurable and that it may descend as a brain diáthesis to his successors till the matter of rank for medical officers is righted in the navy.

This matter of rank recalls a personal experience of the writer when he was acting as an undergraduate interne in the U. S. Marine Hospital Service at St. Louis. There was an epidemic of dysentery in the wards and Dr. W. M. McPheeters had ordered a rice diet, but gave no instructions

about how it should be cooked. The chef sent it up to the nurses insufficiently cooked, each grain being visible and hard. It was wanted soft, mushy and unirritating and the rice was sent back with instructions to cook it soft, as had been the custom for rice for such cases.

The stewardess was satisfied with the way the rice was cooked and took unbrage at it being ordered otherwise. On explaining that we wished to save the patients from any chance for further bowel trouble, she reminded me that she knew how rice should be cooked, had cooked it before I was born, which I conceded, not much apparently to her satisfaction, after she had thought over the answer awhile, though I was still a youth. She outranked me and I subsided, but ever after there was an unfriendly gulf between us. I think the subsequent coolness toward me was due rather to my ungallant admission of her far greater age than mine, for the rice was all right thereafter.

Her voice has long been silent because of a grave incident which took away her power of speech and life at the same time, a not uncommon necessity of subduing the sex under the circumstances, provoked to loquacious contention.

The most sensible view of this matter we have seen emanating from the St. Louis press is this from the *St. Louis Mirror*:

"The hospital is the main feature of a hospital ship and therefore considerations appertaining to the proper conditions of the hospital should be superior to those pertaining to manœuvering in aggression or defence. We do not suppose that it is intended that Surgeon Stokes shall take his place upon the bridge and handle the ship, but we do think that the man with the chief "say so" on a hospital ship should be a man looking at the vessel as a hospital rather than as a fighting machine."

The hospital department of the navy on a cruise should consist of an ordinary medical and surgical ship or of separate medical and surgical vessels, and one or more infection hospital ships. The army has its tuberculosis sanitariums, the navy should have a sanitarium ship for the same purpose and for other infectious cases.

A ship for the convalescent sick and wounded would not be an unwise addition to the fleet of the medical department in a great cruise or in time of war on the sea. Suppose the Bubonic or other decimating plague should get a hold upon the navy at a time when every man and gun should be needed! The necessity of arresting its spread would be apparent and a ship under the command of a medical officer would certainly then be an indispensable necessity.

With a few words from a valuable paper, on an apropos subject by Surgeon General Rixey in the *Military Surgeon* for January we conclude. Rixey is discussing that all-important subject to armies, navies and peoples, tuberculosis, but incidentally he gives other valuable matter appropriate to our subject. He quotes also from Kite and Beyer as follows:

"The poor physique, of perhaps the majority of an average ship's crew, has been frequently commented on by both medical and other officers of the Navy. This matter is of the greatest importance and it appears remarkable that it has not received more attention.

"While we are using every effort to increase the mechanical efficiency of our vessels of war as fighting machines very little is being done to create vigorous, well-developed crews to man them." (Kite.)

"A slow and deliberate, but intelligent and careful building up of the young men of the country at large and of the service is by no means the least of the fundamental features of the preparations for war in peace times and, therefore should ever be kept fresh in the minds of those who have the responsibility of such training upon their shoulders. Nor is it possible to repeat too often the valuable illustrations of the importance of physique that we may derive from recent wars: The Russians entering the Sea of Japan had behind them a fatiguing cruise of at least six months in tropical waters to which by nature they were not accustomed and from the effects of which the Japanese, very wisely, did not give them time to recover. The Japanese, on the other hand, had lived in an ideal climate for four months without steaming and with just sufficient drills to

keep their men physically fit, and on a diet perfectly fresh and wholesome. They were not at all anxious to meet the Russians off the coast of Madagascar, but quietly permitted them to fatigue and exhaust themselves on the trip." (Beyer).

In the matter of poor physique, "the questions that arise in one's mind in carefully scrutinizing a number of such men are: Do these men get enough sleep and is this sleep made as continuous and undisturbed as conditions permit so as to prove restorative; are their meals properly inspected; are they put through their gymnastic exercises at the proper time and with the regularity, care and deliberation which are needed to make them a success; are the climatic conditions under which they live and that are known to influence especially the younger men unfavorably, taken into consideration sufficiently, so as not to allow them to retard their growth and physical development?" (Beyer).

To prevent the dangers of tubercular infection, it would seem urgently advisable, according to Lovering, "That all tuberculous patients afloat and at naval stations should not be retained for treatment, but sent at once to a hospital; and that no tuberculous patient admitted to a hospital should be discharged to duty until examination of the sputa has given negative results" over a considerable period of time. Indeed, it is questionable that cases once having suffered with the disease are ever again fit for exposure to the trying conditions of naval service—certainly not under several years.

"It is hardly necessary to point out that at the naval hospitals all persons suffering with well-marked pulmonary tuberculosis should be isolated from the other patients, and sent as soon as practicable to a sanatorium devoted to that disease alone. This removal is imperatively demanded for the protection of patients suffering with other diseases.

"It would also seem urgent, that at all training stations, receiving ships and barracks where recruits are being constantly received, especial care be used to ascertain those who are suffering with chronic colds or coughs, and that their sputa should be examined * * * *,"

It would be instructive to present this entire paper of Surgeon General Rixey. It ought to be in the hands of every one interested in the power and efficiency of the American Navy. It contributes to show how nearly omnipresent should be the influence of the American Naval Surgeon and how extensive should be his knowledge of therapeutics and sanitation and his authority to enforce the same for the good of the men behind the guns and the officers commanding both.

The government is spending money without stint and ought to, for the most powerful and most efficient ships and for perfect guns, marksmanship, and maneuvers, but the marksmanship, maneuvers, gunners and their officers in their personnel constitute a sanitary force—*a vis a tergo*—that is not enough considered.

America needs as many strong and healthy men in brain and brawn to man her fighting ships and officer them as may be procured to fill the required complement of numbers; able men, rightly ranked, approved and appreciated in her medical staff as well as in the line. Big men, high-minded men, strong, well endowed, "men who their rights and duties know and knowing dare maintain" them. With this devoutly to be wished consummation Captain Mahan may write another book and with just basis proclaim the invincibility of the United States on the sea.

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EDITORIAL.

[All Unsigned Editorials are written by the Editor.]

NEURASTHENIA AT THE ONTARIO MEDICAL ASSOCIATION last May was the theme of a very excellent paper by Dr. S. H. McCoy of St. Catherines, Ontario, and an interesting discussion participated in by Doctors Howland, Hunter, Arnott, Mitchell, Burson and Oldright.

The treatment of the subject in this paper and the discussion would do credit to a neurological society and illustrates how neurology is coming to interest the general practitioner in its clinical aspects, as was predicted at the foundation of this journal in 1880.

The psychic aspects as revealed in the many phobias of neurasthenia, for psychasthenia is prominently manifested in its symptomatology, were not presented quite so prominently in the paper and discussion as an association of alienists and neurologists might have presented them. Nevertheless

the generally expressed interest and fairly correct clinical conceptions of this, now recognized nosological entity, show the trend of general medical interest to be in line with our prophesy that neurology and psychiatry are yet destined to reign paramount in medical thought, as they did in the days of Cullen, when climbing to the then discernable zenith of his fame, he said "from all that he could discern of the movements (etc.) of the system in disease, they were such that they might in a manner be called nervous."

"Quantam ego quidem video motus morborum fere omnes a motibus in systemate nervorum ita pendent, ut morbi fere omnes quodammodo nervosi dici queant." (Cullen's Nosology, book 2, p. 181—Edinburgh Ed. 1780).

The neurasthenic features in the symptoms, special and aggregate of disease, as Cullen saw them, forced this expression of his observation as it appears in his nosology, and the prominence now given to neurology and psychology, neuriatry and psychiatry in general clinical medicine, notwithstanding the advance in bacteriology and the internal secretion conceptions and demonstrations of Sajous, brings us each year in near accord with the semeiologic view, at least, of this old neurological nosologist.

Either primary or secondary or coincident neurasthenia are to be considered in most diseases and much oftener than is regarded in surgical therapeutics, both before and after operative procedures of gravity.

As philosophical and clinical medicine advances, the tendency will be to absorb the specialties and one of the first to lose its autonomy, even now gradually merging into general medicine, will be neurology, especially in its semeiologic and neuriatric aspects and in the iamatologic aspects of practical medicine psychotherapeutics becoming more and more to be favorably considered.

As one ready illustration to hand of the growing potency of psychiatry in general medicine we reach over to our revolving file of the worlds periodicals which we keep near our editorial desk and take at random from the *Deutsche Medizinal Zeitung*, Berlin, Montag. den 4 Nov. and from its index we take the following psycho-neural references show-

ing four neuropsychological out of nine subjects referred to and quoted.

INHALT.

Referate: Walsh, Sommerdiarrhöen der Kinder; Buschan, Basedow'sche Krankheit; Lutter, Psychoneurosen der Frau; Alzheimer, Jakub, Schwangerschaftsunterbrechung wegen Psychose; Kohnstamm, hypnotische Behandlung von Menstruationsstörungen; Ancel-Villemin, Menstruationsursache; Hartje, Uterindrüsen u. Menstruationsphasen; Schucht, diphtheritische Hautentzündungen; Unna, cutis verticis gyrata.

A similar illustration showing the advance of psychoneurology into general medical observation and thought might be found in other representations of medical literature, but not so marked.

Many other foreign general medical journals might be quoted and some home ones, with similar though not so enlarged a showing of the invasion of clinical neurology and neuro and psychotherapy into the domain of general medical observation and restorative endeavor.

On turning to *The Alienist and Neurologist*, 1895, October, and preceding numbers to see what Golgi was then saying about the subject germane to an editorial in the *Journal of Comparative Neurology* on "the doctrine of the neurone" we find a reference on page 631, volume six, to a report by Dr. Alexander Duane of New York, on the progress of medicine in which seven of his ten subjects discussed referred to progress in neural-pathology and this journal made similar editorial comment then as now. And recognition of the nervous system in disease has been advancing ever since and still advancing under the recent demonstration of a function for the pituitary body in the brain by Sajous.

AS TO THE PRACTICAL APPLICATION OF OPSONINS in modern medicine Dr. Cabot from his own investigation states that, "even if as reliable as it is claimed to be, the complicated technique of the procedure renders it impracticable for the ordinary practicing physician. The chief objection to the claims for opsonins, however, seems to be that

they are not true. Dr. Cabot referred to the visit made by Wright—chief exponent of opsonins—to this country, some time ago, and his pilgrimage to Saranac Lake to preach his doctrine and show his methods to Trudeau and his associates. While at Saranac, Wright was given fifteen blood specimens for examination. In his results all differed materially. After his researches were concluded, it was found that seven of the specimens had been taken from different patients and eight from one patient and at the same time. Yet in Wright's results the eight differed as much from one another as they did from the first seven.

DR. RICHARD CLARKE CABOT ON OPSONINS essentials the and non-essentials of diagnosis.

Delivered before the Sangamon County Medical Society, October 10, 1907.

THE INFLUENCE OF ALCOHOL ON OPSONINS is the subject of a contribution to "Modern Medicine" by Dr. Chas. E. Stewart of Battle Creek Sanitarium. He concludes that alcohol, from his and his colleagues Nelson and Stoner's experiments, should be eliminated from our therapeutic armamentarium, because of a lowering in opsonic power of the blood under the administration of alcohol, but Wright says when food from blood serum was soaked in alcohol the leucocytes showed increased phagocytosis.

ENDEAVOR TO DEFINE EPILEPSY.—William C. Graves, secretary of the State Board of Charities of Illinois, after attending the annual meeting of the National Association for the study of epilepsy and the care and treatment of epileptics at Richmond, Va. said:

"The Society will endeavor next year to define epilepsy and establish what constitutes a cure, that is what specific evidence should be accepted as proving that a patient has been cured, such as like the period of time during which he has no convulsions and other evidence of cure."

Epilepsy like rheumatism may be cured by therapeutic suppression of an explosion, the habit of recurrence by per-

sistent elimination of spasm exciting autotoxines but the reconstruction of predeterminating inherent neuropathy of the idiopathic diathesis is a difficult problem, whose solution should begin in the neurone damaging habits of the progenitors of epileptics, especially the ancestral alcoholic toxæmic and other neurone impairing habits, as in venereal toxhæmia, tuberculotic and violent, vicious, excessive venery.

EDUCATION OF THE PROFESSION AND PUBLIC ON INSANITY. At the opening session of the Illinois State Conference of Charities, Dr. Frank P. Norbury, in a recent presidential address before the Twelfth Annual Convention, held at Jacksonville, Illinois., Oct. 9-11, 1907, very properly advocated improved clinical instruction of the medical profession and popularization of our present knowledge of insanity as a public safeguard. The medical profession should provide through its channels, all possible knowledge to fortify against the inroads of disease.

This knowledge has long been needed. The Alienist and Neurologist, now existant nearly thirty years, supplies it.

SOCIAL MEDICAL PSYCHOLOGY.—Dr. Richard C. Cabot, Boston, said that doctors must study social work and diagnostic psychology, educational psychology, psychotherapeutics and race psychology. Educators and clergymen should study all these things and also psychiatry, etc.

The Alienist and Neurologist has been doing this work since 1880. Its work is now telling on the professional and popular mind.

JURY EMOTIONAL NEURONE INSTABILITY is becoming too much manifest of late in verdicts of justifiable petit jury insanity of erotic reasoning mania. The discoverer and divisor of the term "folie raisonnante" would be astonished at the turn the idea of insanity takes with the modern emotional petit jury when there is an erotopathic woman in the case with a seduced or seducing man also concerned.

This unrestrained, wilful, erratic erotism, violative of

love's proprieties, has become, in juries' strabismic mental eyes Americanized "folie a double forme," emotional insanity or "dementia Americana." Petit jury insanity is a remarkable revelation to alienists of the level headed type who must find a disease of brain to justify the diagnosis of emotional insanity.

EROTIC SYMBOLISM—Our readers who have not read Havelock Ellis' classic portrayals of erotic symbolism running through the pages of the *Alienist* and *Neurologist*, have omitted to inform themselves from a thoroughly reliable source of experienced observation and intelligent research, concerning most important morbid phases of erotopathic life, a feature of human character too long regarded as simply and exclusively immoral, whereas many forms of erotic symbolism are but symptomatic evidences of psychoneuropathy, while some are blended immorality and disease.

This is another one of the problems of psychic perversion for the consideration of the physician, the psychologist, the jurist and savant and Ellis has handled his novel theme with masterly judgment and rare powers of description.

THE UNSATISFACTORY TESTIMONY OF EXPERTS lies in our method of determining their qualifications. "All that is required (says Judge Daniel G. Taylor in *Medical Fortnightly*) is that the witness should himself claim to be an expert and be engaged in the practice of the particular calling in which the knowledge sought is supposed to be common. A licensed practitioner of medicine, however ignorant, is permitted to dilate, for the further confusion of the jury upon any subject coming within the range of medicine or surgery. In this way witnesses are permitted to testify upon subjects about which they know but little. These ignorant persons announce unfounded and erroneous opinions and conclusions, and when they find themselves cornered upon cross-examination, pile falsehood upon falsehood in their effort to sustain their first statement.

It has been suggested, but I am inclined to think without much reason, that the form of hypothetical question is

in a measure responsible for the difficulty to which we have alluded. It is true that these questions are often involved and sometimes senseless, but a careful consideration of this difficulty will lead inevitably to the conclusion that it arises from the ignorance or inaccuracy of the lawyer asking the question, and not from any fault in the system."

VIENNA'S NEW PSYCHOPATHIC HOSPITAL will accommodate three thousand inmates. The cost of the institution and grounds was two and one half million; about eight hundred dollars per bed. It has a Sanitarium annex for three hundred and fifty patients. This is a large institution. The Napa California State Hospital, Elmer E. Stone, M. D. Medical Superintendent, contains 1650 six-foot beds with ample recreation grounds and all of the appurtenances of the best eastern hospitals. It may be well to recall that when the institution was contemplated the medical superintendent was selected at the same time as the architect and both were sent over the United States and to Europe to study the latest advances in similar hospital construction and to incorporate the best in this occidental border state building.

Dr. Wilkins, an observant enthusiastic physician, capable in practice and scholarly in the literature of his profession, profited much by his two year tour of Europe in the interests of the Napa State Hospital and became one of the foremost among the several very efficient psychiaters of the Pacific coast. His enthusiasm and proficiency in the field of clinical alienism impressed itself for all time on the profession of the setting sun area of the United States as the marked ability of his several successors in the ranks of California psychiatry confirm.

RECUMBENCY IN INFANTILE PARALYSIS.—"Persistently maintained recumbency, the most important agency of all" is the injunction of Adoniram B. Judson for poliomyelitis anterior. This is nature's therapeutics with the lower extremities, for in the beginning the child can neither walk nor stand and ought not to be forced to attempt it.

The child can have passive motion without the superimposed weight of the body and get as much exercise of the musculature of the limb as an astasic can.

DEATH OF CHARLES FOLLEN FOLSOM, M. D.—At the regular meeting of the Boston Society of Psychiatry and Neurology, Oct. 17, 1907, the following resolution was passed.

“Dr. Folsom was one of the original and most valued members of the Medico-Psychological Society, the parent of the Boston Society of Psychiatry and Neurology. His thoughtful contributions were always listened to with the attention and respect accorded to an acknowledged authority, and his continued interest in our meetings was felt by all of us as a stimulus to good work. His public labors were fruitful in many benefits to sufferers from disorders of mind. Not only was he an admirable secretary of the State Board of Lunacy and Charity, but it was due to the recommendations of the special commission of which he was a member that the present State Board of Insanity was established and the insane removed from the almshouses and placed under the direct protection of the state. His brilliant mind, his fertility of resource in the treatment of disease, his deep sympathy for his patients and devotion to their needs, the far-reaching benefits to the insane of the commonwealth from his enlightened public work, his warm interest in the labors of his colleagues and loyalty to the claims of friendship so won our regard and admiration that we feel his death as a personal and public misfortune.

GEORGE F. JELLY.

JAMES J. PUTNAM.

HENRY R. STEDMAN.

Memorial Committee.

A long acquaintance with the life and good work of Folsom in the fields of Psychiatry and Neurology justify our endorsement of the foregoing memorial record of appreciation.

DR. CHAS. P. BANCROFT'S twenty-fifth year as superintendent of the New Hampshire State Hospital, was cele-

brated by a number of his colleagues, many of whom had formerly been associated with him in professional work. They gave him a well merited dinner, Oct. 15, at the University Club in Boston. A good man of medicine rightly treated.

DR. HENRY A. COTTON, of the Danvers Insane Hospital, recently appointed medical director of the New Jersey State Hospital for the Insane to succeed Dr. John W. Ward who resigned, is also a good man in a good place. During his stay at Danvers, says the Boston Medical and Surgical Journal, Dr. Cotton has won for himself an enviable position as a psychiatrist.

DR. CHAS. A. FOSTER, physician to the New York State Hospital for the Insane, on Wards Island, who died May 19 at the age of fifty-eight years was a man of ability, modesty and judgment in the relations of life.

WAS LEHRT UNS DER HYPNOTISMUS? The *Deutsche Medizinale Zeitung* replies to this question before the Psychologische Gesellschaft asked last year by Herr Moll and discussed in relation to telepathia and occultism of all sorts, spiritism, autosuggestion, trance, etc. It gives us a clearer view of the fakers and opens a new perspective to popular psychology and ethnologic problems and the medical profession looks on and learns from the play of erratic and disturbed psychic neurones and beholds that "there is a spirit in man" which though the Almighty hath not "given understanding" man doth not yet comprehend its bizarre movements.

Who among the thousands of readers of the ALIENIST AND NEUROLOGIST will further answer this question from their personal experience with psychic phenomena or with the psychic phenomena of this peculiar display of which we know so much and yet so little?

What have we learned from hypnotism?

TRAVEL FEAR AS A NORMAL SYMPTOM IN AMERICA.—Sideromophobia, one of the travel fears of the many

forms of psychasthenia, is likely to pass from the domain of pathology and become a very rational fear in view of the many horrible railway accidents constantly occurring from overtime brain-strain exacted of employees and the general speed craze of railway managements.

There is no economy as there is no humanity in some of the present railway service exactions. They are altogether too strenuous in some respects. As the immense engines, now used, are too large and heavy for many of the present tracks, so the strain of handling the throttle valve and the constant lookout for twelve or more hours often at a stretch without brain rest is as bad as the brain violence done to the health and life rights of the motormen and street car conductors who work their brain all day in ceaseless vigilance. The former trying to avoid maiming, killing and other accidents, the latter trying to collect the strap-hangers' and platform passengers' money in a sixty passenger car (which should have two conductors) carrying a hundred people and one conductor.

W. J. Wood, Indiana Railroad Commissioner, informs us in *Leslies Weekly* that from 1897 to 1904 inclusive, the total number of killed in railroad accidents was 62,213 while the number of injured amounted to 451,262.

Sideromophobia, (fear of railway travel,) is likely to become a general and normal dread from the way brain break and death are being promoted by the murderous revenue producing methods of our great railway managers who murder the minds and bodies of men to increase earnings. Not only travellers but employees will come to dread the railway and their danger. We are all in danger of becoming amaxophobic.

A JUDICIAL VIEW OF DISEASE.—The Supreme Court of Iowa in the case of *Kenny vs. Bankers' Accident Insurance Company of Des Moines*, says of traumatic neuritis: "It is for the jury to say whether it was a disease as referred to in the accident insurance policy involved in this case. A "disease" is a malady, affection, sickness or disorder, and, as used in the policy, it meant something

different from a wound or hurt producing an injury and immediate functional disturbance."

What does a wound or hurt amount to if it does not produce an injury and immediate functional disturbance or later functional disturbance? American courts are sometimes remarkably lucid on medical matters—"clear as mud." We may look next to see some of the courts deciding how physicians should practice medicine. Try again, judge!

A ZONE OF QUIET.—The city fathers of Chicago, says the *Chicago Clinic*, have done a good work in the creation of "Zones of Quiet" in the vicinity of the various hospitals of Chicago. By ordinance, the area surrounding each hospital, in every direction for several hundred feet, has been set aside for the purpose of "keeping of the peace" and there no unnecessary noise will be tolerated. Therein the festive hurdy-gurdy will never again indulge in its orgie of discord; the noisome fruit vender will not be heard crying his belly-cramping wares and even the belated roysterer will be reminded that his home-coming anthem must be sung in moderated tones and he will be urged to follow his zig-zag course on tip-toe. This action is taken by the Chicago city council for the benefit of the sick, that they be not unnecessarily disturbed. What this will mean in some serious cases of illness, the physician will thoroughly appreciate.

We hope to see the "Zone of Quiet" widened in all cities as people become more enlightened in the essentials of sanitation which belong to the mind and brain, until quietude will be the rule where and whenever practical among large aggregations of people. At least the howling vendors of papers and provisions, noisy tramway, the killing, flat wheel and nerve shattering street car trucks, motor and steam whistle toots might be caused to cease along with the needless disease-germ disseminating dust.

THE FINANCIAL INSANOID, THEIR PROSPERITY PANIC DELUSION. Delusions are rational or irrational, normal or abnormal, morbid or healthy, according to their cause.

Just now there are individuals in this prosperous land,

whose barns are filled with cotton and corn and the "finest of wheat" and banks whose vaults and safety boxes hold the best of securities, who but lately trembled and some are trembling still in fear of financial calamity. How can bankruptcy come now to a country like this? The present paresis, in the financial world is the result of over-capitalization, stocks and bonds suddenly converted into cash, more enterprise and business than money to keep things moving and fear, indefinite fear. More money than ever before in the country's history out and less in the banks for the increased demands of further prospective business and the delusion that is now selling good stocks at pernicious sacrifice and the hallucination that would part with more than can be bought with the currency in circulation.

We are passing out of a delusional panic from over prosperity; the materials of agricultural and mechanical and commercial prosperity are in our possession. The machinery of prosperity is sound and ready to move again so soon as the steam for starting can be raised and is even now moving again.

The water of inflation has been squeezed out of over-capitalized stock. The sharp ones did it before the banks and trust companies announced their inability to meet such further cash demands as would be made by the wild run of the insanoids under the panicky delusion that the country is financially ruined, ruined with its yielding fields, factories and mines and even the wildernesses yielding food through irrigation, for us and our children, and cactus converted into fodder and flour. The wise ones are even now buying back good stocks and bonds at panic prices, sold on a better market and the banks are getting back more than their reserves again.

Bank examiners have not reported the moneyed institutions bankrupt but the deluded insanoids jumped at the irrational conclusion and some had psychic convulsions of fear. The panics that start from Wall Street often begin in the morbid financial fears of over brain-strain psychasthenia. Psychasthenia makes panics.

We once knew a mind overburdened brain overstrained man, suddenly conclude he was coming to want and would not be able to pay his taxes when his income was forty thousand annually. He milked his own cow, harnessed his own horse and cared for it, (sold the others) dismissed all his servants and his wife's, urinated sugar for awhile and had insomnia, but finally recovered completely and has lived without any such fear through the present crisis. Others with less income or more fall, through brain overtax into the same morbid way of feeling and thinking.

One kind of an insanoid is a man who, under mental stress of any kind, acts as though he were insane, but has not the disease of real insanity to excuse his actions.

He hovers on the verge but does not pass over into real mental aberration as he appears to be going. He does and says such odd, unreasonable and annoying things, that his friends often wish he would pass into genuine insanity, so that he might be properly and lawfully restrained or that he might happily extinguish himself by suicide and sometimes he does, or becomes really insane and we then know where to place him.

A LIBIDINOUS SLANDER on the average man was laterly, foolishly and unwarrantedly uttered by a physician in a speech to the National Purity Party, to the effect that men are so importunately salacious that he knew of none who, if women showed the slightest inclination or vacillation would neglect the opportunity to steal virtue. He further said:

"If the truth were known about man's importunity in the case of the stenographer, the office girl and the nurse, society would stand aghast." He urged girls "not to endanger themselves, and always to be escorted home in street cars, not cabs."

This is monstrously false, the doctor must have had a bad lot of intimate libidinous acquaintances that such a false, unjust impression of men's sense of honor and virtue toward women should appear to him to be so horribly deficient. The average American is a man with a high

sense of honor and chivalric protection toward women to whom women's weakness is a shield and protector with all but a few unnatural men. This is a base slander of this "lubric and adulterous age" wherein the lasciviousness of the few have been mistakenly characterized as the lewdness and unbridled lechery of the many. Such an unjust speech is harmful because not founded in fact. While there are ghouls in human form who would prey upon women as there are robbers of men, their insignificant number does not justify this intemperate assault on American manhood and honor. Concupiscence is not a characteristic of normal men in the presence of normal women nor is it common in the company of lewd members of the sex. But vice is a monster, etc. and seen too oft, etc., normal men finally embrace under feminine importunity.

THE MISSISSIPPI VALLEY MEDICAL ASSOCIATION held one of its always interesting and profitable meetings at Columbus, Ohio, where Dr. F. F. Lawrence, as chairman of the Committee of Arrangements, made the social side of the meeting most agreeable. Henry Enos Tuley got the members together in large numbers while Horace Grant entertained all with one of the best of medical addresses of modern times. Cartlege and McMurtry of the old Chutmuck circle were there, Mathews ought to have been and would have been had his auto permitted.

Altogether there was an assemblage of many men of merit in medicine and in medico-social esteem and they did a good work for the short time they were at it, from October 8th to 10th.

SECRET NOSTROMS AND THE DOCTORS OF KENTUCKY—641 of them, in state convention assembled, following in the wake of the A. M. A. have resolved against prescribing secret nostroms.

A physician who prescribes a preparation, the contents or proportions of which are unknown to him, goes it blind and gets not the best sort of therapeutic experience to advance himself in knowledge of the mastery of disease.

Doctors should know as clearly as possible what they are doing with their therapeutic armamentarium. The exact therapeutic proportions of every proprietary should be made plain.

AS TO THEIR SANITY, some of the police force of St. Louis should be examined and compelled to pay for the examination, for instance the officer who had the girl cashier locked up, who fired the cash drawer revolver to call the police to stop a murderous fight begun in her place, November first, and such police also as consider every unconscious man a drunk or dead asleep, such as epilepsy, epileptic fainting or head traumatism, without blood, etc., and thumps him over the feet or head to wake him up.

A JUST REBUKE.—“The wounds of a friend are faithful” and we are pleased to note the following words of chastening in the St. Louis Mirror, a literary weekly periodical of merit, addressed to a meritorious but morally careless friendly daily as to misleading but death alluring quack advertisements.

“Science’s testimony on every hand is that cancer is an incurable disease. Yet so upright a paper as the Post Dispatch advertises a cancer cure. Other local dailies do the same. This is only aiding and abetting the robbery of the poor and unfortunate. The moral press should not be a confederate of the vilest kind of fakers. There is a law against fraud and the law should be applied to the papers advertising cancer cures, for as there is no cancer cure, he who promises such a cure must promise what cannot be performed and is therefore a fraud. The papers are parties to the swindle.”

We hope after this the good P. D. will not do it any more. The man who preys on the hopes of the hopeless, filching on false pretenses of cure the pennies which might give surcease of pain and bring normal euthanasia and other comfort to the doomed victim of real cancer is a wretch.

A TRAINING SCHOOL AND HOSPITAL for the Idiotic and Feeble Minded and a First Aid for Prodromal Lunatics

and an Inebriate Retreat are much needed in this city. Suitable subjects might be secured for an inaugural opening by special selection among the lower house of our city legislators. They seem to have forgotten the "Folk lore" of their predecessors, and to have become amnesic as to duty, law and danger regarding the peoples' rights and vigilance. The graft fever appears to have broken out again among some of them. The fever seems to have taken on a recurrent form since Dr. Folk went to reside in the Capitol.

AIRSHIP SANITY AND INSANITY.—The mythical ambition of Daedalus, ancestor of Socrates, has seized upon the people to navigate the air and last year the firmament about St. Louis was full of aeronauts and their ships and balloons. None got quite so near the sun as the fabled Icarus nor scorched their waxy wings as the fabled son of Daedalus did, causing a fall into the sea, but Oscar Erbsloth, pilot of the Pommern, landed on the beach at Asbury Park with Le Blanc near by him in the same state—New Jersey, each about 875 miles from St. Louis, the point of departure; the record made by Wise, who with Hyde of the St. Louis Republic sailed the air in 1850, landing not far distant at Henderson, in New York, 780 miles. Wise made a later voyage but was never heard from after.

An insane patient was once brought to the hospital at Fulton, during my superintendency of that institution, who did not fall as far as the unfortunate son of Daedalus, but he tried it with his spread out arms and coat for wings from the top of his barn and landed in a dung heap on his head.

The success of Santos Dumont, the La Patrie last year, the Wright brothers in 1905 and the successful dirigibility shown in the flying machines in the world contest at St. Louis last October, and other successes elsewhere up-to-date but too numerous to mention here, establish a rational probability of the successful accomplishment of practical aerial navigation at no far distant day. But the troops of

balloonatics who will follow in the terrestrial wake of these airship experiments will probably be as great as the number of morbid telepaths and phonopaths who came to the front when Morse's and Bell's inventions were first put in successful operation. Lunatics sent and received voices through the air in their delirium long before Marconi or De Forest transformed their insane conceptions into veritable transmission.

The London Magazine, the St. Louis city press, Gordon Bennett Prize and the St. Louis world contest have inspired the sane side of this editorial; its insane aspect belongs exclusively to the author, but do not construe this clause unkindly. Sane anticians were represented in the memorable sky sailing contest. The psychic anticians, casting mental shadows rather than light upon the propositions balloonatic may now be looked for in the aeronautic field.

There will likely be also a good chance for the profession to some day get experimental results on higher atmosphere therapeutics and hygiene. Maybe we shall yet have balloon hospitals sustained in upper air for consumptives, neuropaths, etc.

THE PROGRAM OF THE FESTIVITIES at the Amsterdam Congress of Psychiatry, etc., was a most entertaining and enjoyable one as follows: Social gathering Keizersgracht. Reception by the Students' Club. Shadow Pictures á la Chat noir. Boating excursion to Zaandam and the house of Czar Peter. Performance at the municipal Theatre. Living pictures after works by Dutch masters, Representation of Old National Rural life, Old Holland songs. Excursion to Leiden, the Hague and Scheveningen. Visit to the Asylums "Endegeest" and "Rhijngeest". General closing meeting at Scheveningen and final dinner. The sentiment of satisfaction and enjoyment among visiting members was general. All were happy.

It was the editor's misfortune to miss a part of the entertainments and meetings because of a severe cold caught in Rotterdam on his way to Amsterdam which threatened a return of an old gripe, previously contracted in Paris and which, for several years, had given him much trouble, anxiety and required caution because of its threatening neuropathic

sequellae of vertigo, neuritis, etc. A personal experience with la grippe, added to observation thereof in others, has convinced the writer of the full gravity of neurotic entailments of this nerve center toxic foe of health.

The weather during most of the congress did not equal in cheerfulness the cordiality of the Holland reception, though the last day the sun shone in cheerful splendor and the last happy night at Scheveningen can not be effaced from the mind's memories of genial charming cordialities.

NEEDLESS NOISES are very justly to engage the attention and repressive efforts of the Civic League of St. Louis. This is a wise move in the direction of the people's comfort and health. The flat wheeled tramway car, noisy rattling truck and roughly jointed rail should cease.

ADRENAL BRAIN TUMORS OR BRAIN ADRENAL TUMORS, WHICH? With Sajous' remarkable book on "The Internal Secretions" before us, and a monograph by Channing and Knowlton likewise close at hand on a "Case of Metastatic Adrenal Tumors" in the brain, we are prompted to ask this question and to produce elsewhere the post-mortem finding and seek for more light for our pages on this interesting subject.

"SOME HYSTERIA, ERGO ALL HYSTERIA" is a diagnostic error concerning this psychoneurosis which the *Alienist and Neurologist* has for a long time endeavored to remove from the minds of medical men in general practice.

Apropos and in confirmation of the harm to women resulting from this mistake in diagnosis, we have heretofore given indubitable evidence from our own clinical observation. We now call attention to one of the most valuable of the many valuable contributions during 1907 in *L'Encephale*. The article presents the results of the examination of the nervous centers of two cases of hysteria by Dr. Henry Claude, the illustrations of which we reproduce, (see Selections under Neuropathology).

We should like also, if our space permitted in this issue, to reproduce the entire most estimable communication. In

the selection department of *L'Encephale* may also be seen an abstract of a case of Foot Clonus with Babinski Sign in Hysteria reported by Van Gehuchten in *Le Neuraxe*, vol. viii, pages 2-3, also a novel case *Precis of temporary absent patellar reflexes in hysteria*.

Thus are organic conditions once regarded as indubitable evidences against the existence of hysteria multiplying in medical records. The field of positive diagnosis of this mimic neurosis, once regarded as always functional, often has grave organic base or bases of disorder.

PUBLIC SENTIMENT WRONG ON THE UNWRITTEN LAW. A newspaper truly says:

"The mind of the mass is not as sane as that of the law on the subject of the position in society and popular regard of the man under charge of criminal conduct. A chorus girl, accused of ending a night's debauch with the murder of her companion, is dined and feted as if her conduct entitled her to social recognition. A pampered millionaire's son who puts the climax to a career of luxurious sin by a cold-blooded murder and then sends his own wife to reveal her own shame, is given the fulsome adulation of a numerous crowd of sickly sentimentalists. The taint of crime is made a badge of honor."

DISPENSING PHARMACISTS' INTERRUPTIONS.—The *Denver Post* has a suggestive illustration on this subject. The pharmacist is pictured as endeavoring to fill a prescription and spilling something from a bottle whose mouth is aimed at the top of the graduate but has missed it, because of the man who asks where the telephone is, the woman who wants five cents worth of stamps, the child who wants a stick of candy and the inopportune telephone call of a party who wants another number. The moral of all this and more is, that pharmaceutical dispensing shops should be separated from the variety drug store, toilet, candy and soda and universal necessities store. The medical profession and the people need some real dispensing pharmacies.

THE LOSS OF A VALUABLE AND UPRIGHT MEMBER OF THE MEDICAL PROFESSION comes vividly to mind with the regular visits to our office of the *Medical Record*. Dr. George F. Shrady, late editor of the *New York Medical Record*, since its foundation in 1866 to 1904, and author of many contributions to medical science, died in New York City last November at the age of seventy.

THE COMMERCIAL DOMINANCE OF THERAPEUTICS and the movement for reform was the timely topic of Dr. George H. Simmons' annual oration before the Medical and Chirurgical faculty of Maryland last April, published in full in the *Maryland Medical Journal* for October.

THE ABSENCE OF ADEQUATE ANTISEPTIC VIRTUE in a large list of proprietary antiseptics, beginning with Listerine and including a long list of "ines," "ones" and "ols" has lately been noted. Some are no better than simple saline solutions.

THE ANNOUNCEMENTS OF THE TUBERCULOSIS CONGRESSES, National, International and State, evince the right determination to eradicate this scourge from mankind.

The time is coming, when through public enlightenment and health authority vigilance, the sources of tuberculosis will all be ferreted out and the plague destroyed. The milk and meat and all else that we eat and drink and our habitation and clothes will be made free of tubercles and safety thereby will be secured. The exposure of edibles, fruits, candies, etc., to city dust will be stopped by law.

The occupation of the old clothes and the secondhand furniture man will be gone, the diligent darkey duster in Pullman coaches and the plush seats and curtains will disappear and inspection and renovation even to the washing of soda fount and drinking saloon glasses in pure running water will become the order of the day when the crusade against tubercle-infected dust and food and drink get under way in the coming sanitary and life-saving crusade.

ERRATA in volume xxviii, number four, under caption "Recuperation from Cerebro-Spinal Meningitis, page 502, read, This is an adneural disease. On page 533, line 21, insert the omitted words "it sustains to."

INSANITY FROM THE EXPLOSION OF THE FONTANET INDIANA POWDER MILL, October 29th, was one of the results to be added to the thirty-four deaths. The watchman, Elmer Bright, lost his leg and his mind at the same time.

THE SAUNDERS COMPANY have found it necessary to issue another revised edition of their illustrated catalogue of medical and surgical books. We find that since the issuance of the last edition, six months ago, the publishers have placed on the market some twenty-five new books and new editions.

A PECULIAR FORM OF PSYCHIC AMNESIC AGRAPHIA is described by George M. Gould (*Medical Record*, Nov. 2, 1907.)

His patient, aged 52, upon whom rests heavy responsibilities, a highly trained civil engineer, cannot think and write at the same time. He can dictate to a stenographer thoughtful and planning letters, but to write the simplest business or even social letter requiring any intellectual attention or phrasing is absolutely impossible. He is under the necessity, therefore, in travel and at home, of having a stenographer about in order that he may answer letters, describe and attend to his work, etc. As a child, he was tortured for years to make him write with his right hand. The natural writing center in the right cerebral hemisphere was thus rendered atrophic, crippled, or unusable, and the artificially stimulated mechanism in the left side of the brain could never be made to work correctly or easily by the other intellectual organs during the instant in which they had their own tasks to perform. This case is not attributed by our friend to eye strain.

A CASE OF TWO-HANDED SYNCHRONOUS WRITING by the same author is interesting reading throughout. It is from this article that the above case is taken. The author plausibly, though we think not conclusively, assails the prevailing disposition of the sinister superstition of all right handed tyrants to make the left handed, right handed or ambidextrous.

What a world it would be, the author says, if those who are wiser than God and Nature had their way, etc.

He thinks a flood of light is thrown upon history, sociology and medicine, especially upon psychology, neurology and psychiatry by left handedness and its sequel. But we have not further space to quote.

OBITUARY.

DR. A. M. CARPENTER, Vice Dean and Professor of Clinical Medicine of the Medical Department of the Barnes University, was a life-long and forceful teacher of medicine and a meritorious and successful practitioner of his profession.

He taught with success in the Marion Sims and the Barnes Medical Schools of St. Louis and previously at Keokuk, Ia., and in the College of Physicians of Chicago. Fluent and forceful as a lecturer and kindly as a man, he is remembered by two generations of physicians who sat under his teaching and later distributed themselves over the United States and other countries.

A remarkable thing about his last illness, was the fact that he recovered from the attack of tetanus which brought him down, resulting from a splinter prick. The accident occurring in the stall where he kept his favorite horse, and a portion of the splinter remaining several days in his finger. The tetanus had disappeared entirely and his much-bitten tongue had about healed when a strangulated bowel from which he had begun to suffer excruciatingly was operated upon. He did not rally from the operation. Dr. Carpenter's age was seventy-three. He was a native of Kentucky. He will be sadly missed by hosts of students now in active practice throughout the United States, by the family he loved and the faculty who esteemed him as an accomplished and amiable colleague and friend.

SELECTIONS.

FORENSIC PSYCHIATRY.

Morbid impulses are, according to Gordon, *New York Medical Journal*, lucidity concerning phenomenon, resistance to impulse and consist of moral torture. Morbid impulses are sudden function of a center, or group of centers without reason, impulses of will controlling the act; to moderate and control the passions is possible only to a brain free of hereditary or acquired taint. This is as difficult in a brain whose anatomic and functional integrity is affected, as it would be to straighten a sclerosed spinal column or one otherwise deviated. The first point to determine is whether insanity or only a neuropathy exists. Morbid obsession is a combination of absence of motive, integrity of conscience, and a preceding mental struggle. In the first stages of a mental affection, in epilepsy between the attacks, in some cases of paranoia the decision of insanity is difficult.

Determination of the degree of responsibility should be in the hands of an alienist. The author protests against the legal idea which considers a man sane before or after a crime but insane during the act.

NEURODIAGNOSIS.

HÆMORRHAGE OR THROMBOSIS.—The initial depression of the bodily temperature is far more marked in encephalic hæmorrhage than in either thrombosis or embolism. Practically, apart from hæmorrhage, a lowering of the temperature below 96° is only observed in thrombosis of the basilar artery.—*Dr. Charlton Bastian, in The Hospital.*

NEUROPATHOLOGY.

Illustrations of Organic Cord Damage in Hysteria referred to in editorial.



FIG. 1

FIG. 1. — Coupe de la moelle de Etch... Petite plaque de sclérose occupant la corne antérieure gauche et la zone radiculaire antérieure.

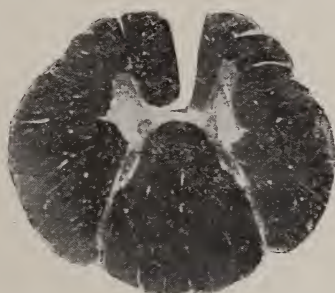


FIG. 2

FIG. 2. — Hémiatrophie de la moelle à droite, région dorsale.



FIG. 3

FIG. 3. — Cas Corn... Corne antérieure droite dans la région cervicale, atrophie et disparition des cellules ganglionnaires.

Fig. 1. Small sclerosed patch in left anterior horn and anterior root zone.

Fig. 2. Hemiatrophy in right dorsal region.

Fig. 3. Atrophy and disappearing of ganglion cells right cervical anterior cornu.

CLINICAL NEUROLOGY.

FATAL REFLEX ANURIA AND COMA AFTER URETHRAL EXAMINATION.—Bennecke reports the case of a man of sixty-five who came under treatment for chronic nephritis, cystitis and chronic uremia. He recovered from this. He was then explored for stricture. None were found but spasm at the vesical sphincter and severe pain resulted increasing to delirium and coma, dying thirty hours after. During this time no urine was voided and at the autopsy none was found. The author says that the condition was due to reflex inhibition originating in the spasmodically contracted sphincter of the bladder. The autopsy showed no injury to the urethra by the examination.—*Abstracted and abbreviated from Muenchener Medizinische Wochenschrift.*

OTIC SCLEROSIS AND ITS RELATION TO ARTERIO-SCLEROSIS.—Souleyère distinguishes two forms of otosclerosis, one frequent in young persons and of the adhesive type, resulting from suppurations and catarrhs of the ear; the other a true sclerosis, occurring only in later life, especially after thirty years of age. This he calls pure otosclerosis. Heredity has importance as a factor in its production. So have chronic diseases such as syphilis. Its early symptoms are negative, deafness that is progressive, tinnitus, and dizziness are the principal ones. It is relieved by removal of cerebrospinal fluid. There is present hypertension in the arterial circulation, and treatment for its relief is of value in helping this form of otosclerosis. *La Presse Médicale, Belg.*

THE INFLUENCE OF SALT IN THE DIET ON ARTERIAL TENSION. R. Bayer (*Arch. für Experimentelle Pathologie und Pharmakologie. Bd. 57. Hft. 1 and 2, p. 162*) reports from Krehl's clinic very interesting observations on the effect of changes in the salt content of the diet in cases of arteriosclerotic hypertension. A practically salt-

free diet (about 4 gm. NaCl per diem) invariably reduced the blood pressure by considerable amounts, frequently as much as 30 mm. Hg. while the addition of 15 gm. of salt to this diet always gave a marked rise in the blood pressure, considerably above that noted on an ordinary hospital diet. All of these cases showed a well-marked salt retention, that is to say, the salt administered was only in small part excreted within twenty-four hours. It should be particularly noted that these were all cases of arteriosclerosis in which with increased tension there was no evidence of nephritis. This work is of great value, for it shows how the blood pressure may be reduced without the use of drugs, and explains the fact, already known, that a milk diet will reduce the tension, a milk diet being one containing relatively small amounts of salt. In nephritis, on the other hand, the same rules do not seem to apply. C. Loewenstein (same Journal, p. 137,) working also at Krehl's clinic, was unable to obtain any constant results on blood pressure by varying the amounts of salt in the diet, contrary to the experience of several French observers. Out of 10 cases only one showed a marked increase of pressure after the administration of salt, and in one case of chronic nephritis, in which there was a very marked salt retention, the blood pressure actually decreased during the administration of large doses of salt. It is interesting to note that in two instances after large doses of salt, edema of the lungs occurred, but was relieved by the use of cardiac stimulants and venesection. The administration of large amounts of salt to nephritics is therefore no indifferent procedure, and requires careful watching of the patient. [W. T.]

—*Excerpt Bost. Med. and Surg. Jl.*

SAMUEL JACKSON AND ALCOHOLIC MULTIPLE NEURITIS.—This condition was described by Samuel Jackson, Sr., of Boston, in 1822, the discoverer of other anaesthesia, as alcoholic paraplegia, but it has only been since the researches of Ross, Buzzard, Hun, and others that the paralysis resulting from the excessive use of alcohol was

known to be due to inflammation of the peripheral, motor, and sensory nerves.

The profession is indebted to Dr. Wharton Sinkler for calling renewed attention to our American Samuel Jackson's pioneer relation to the discovery of this phase of the relation of alcohol to neuritis as a simulator of posterior spinal sclerosis.

THYROID GLAND INFLUENCE OVER LIME METABOLISM.—Silvestri has observed cases of rachitis in which defective thyroid functioning was concomitant. He also calls attention to the efficacy of thyroid treatment in various forms of hemophilia, prostatic hematuria, and other pathologic conditions. He presents evidence to sustain his assumption that the thyroid favors the development of callus, consolidation of fractures and the growth of bone in general. He tabulates the findings in regard to the metabolism of lime in a number of persons taking thyroid treatment for various affections. These findings show to him the calcifying action of the thyroid. Thyroid treatment favors retention and assimilation of lime, and the liver shares in this task. (*Una funzione della glandola tiriode non ancora ben studiata.*) T. Silvestri and C. Tosatti.

NOCTURNAL PARALYSIS.—I. H. Coriat reports four cases from the neurological clinic of the Boston City Hospital and one case previously recorded in the literature.—*Boston Medical and Surgical Journal*, December 5, 1907.

INDICANURIA, ITS ETIOLOGY AND PRACTICAL SIGNIFICANCE.—Wm. H. Porter (*Med. Rec.*, June 15, 1907) says that indicanuria is one of the most important conditions in connection with clinical medicine. Bayer showed that a simple substance, indol, was the antecedent of the more complex indican. It is now known that indican is the result of putrefactive fermentation. While animal proteids are more likely to undergo putrefactive fermentation, vegetable proteids are much more difficult of digestion; hence they are less economic and often detrimental to the system.

Bacterial action is always required to produce putrefactive fermentation in connection with the production of indican. A sulphur atom, which is required for the formation of indoxyl potassium sulphate, from which indican is generated, comes from the proteid molecule as a result of its oxidation reduction. The primary seat of the formation of indican is the intestine, not the liver, as has been supposed. At the same time that it is produced many other toxins are formed, which are absorbed into the circulation from the alimentary tract, and excite an endless variety of symptoms by their effect on the nervous system. The conditions favoring the production of indican are errors in diet, lack of outdoor exercise, defective digestive secretions, and profound disturbances in the working of the nervous mechanism. Indican is never a normal urinary constituent, but always indicates an abnormal condition of the system, since putrefaction cannot be regarded as a normal physiological process. Successful treatment of the condition associated with indicanuria always depends on accurate apprehension of the etiological factors producing it, and the best method of removing these factors.—*Dr. T. A. Hopkins, excerpt in Medical Fortnightly.*

BOIT (*Frankfurter Zeitschr. f. Path.*, Bd. 1., Hft. 1) had the opportunity of dissecting two bodies who, for no apparent reason, died soon after the removal of goitres. Both had a persistent thymus and the whole lymphoid tissue was hyperplastic. He thinks that in future account must be taken of this condition when the question of operation is considered.—*Med. Review, Oct., 1907.*

MENDEL ON VENESECTION IN MEDICAL PRACTICE.—(*In Therapie Der Gegenwart, July, 1907.*) There are many well-grounded indications for blood-letting. The results are so striking, as well as important, that it is the duty of every physician to acquaint himself with the technic of, and indications for, venesection. The former is simple; the arm that shows the best developed veins at the elbow is selected and bandaged at the middle third

of the upper arm with a rubber bandage three-quarters meter long and six centimeters broad, made tight enough to retard the venous flow, without hindering the arterial. The skin over the most prominent vein should be cleansed with alcohol, ether or benzin. The vein is held in position by the thumb of the left hand while the fingers grasp the lower arm and draw the skin taut. The incision should be made with a curved bistoury, the concavity being directed upward, the hand then depressed until the knife lies flat, when the vein is opened from within outwards and in the direction of its length. The blood should be received in a graduated vessel. If the flow lags, it may be promoted by vigorously opening and closing the hand. The wound should be dressed antiseptically.

Blood-letting may be of value in gas poisoning, eclampsia, gout, chlorosis and local or general disturbances of the circulation. In gas poisoning bleeding in part removes from the circulation the largely useless, poison-laden blood, stimulates the vasomotor nerves that control the circulation, stimulates the diffusion and resorption of water from the tissues into the blood, diluting the poison and promoting the escape of the gas. The value of bleeding in eclampsia is generally known. The blood taken should be replaced by a similar quantity of normal salt solution, and if the convulsions are violent, morphia given hypodermically. In acute nephritis bleeding may be resorted to as a prophylactic, and Mendel believes that it may ward off a threatened uremia. In chronic nephritis, insomnia, apathy and headache are indications for bleeding, and if these symptoms recur, it should be repeated. In treating gout, alkaline mineral waters are prescribed to increase the alkalinity of the blood and promote the oxidation of uric acid to carbonic acid and urea, but this is better accomplished by blood-letting, which promotes the diffusion of fluids from the tissues into the blood, which is rich in salts and poor in proteids, and a more rapid escape of salts than of proteids, and stimulates metabolism. Mendel has bled gouty patients as a prophylactic measure, and in some instances the prompt disappearance of pain and other symptoms of inflammation

has so impressed the patients that on a reappearance of these symptoms they voluntarily asked to be bled, and he speaks of bleeding one patient several times each year for a number of years. In chlorosis small blood-lettings followed by warm packs and hot tea to promote sweating stimulate the blood-making centers and increase the red cell count. In disturbances of the circulation, bleeding lowers the blood pressure, but of most importance is the reduction in pressure in the pulmonary circulation, which promotes the circulation in the capillaries and relieves congestion. The work of the heart is further lessened by diminished viscosity of the blood. In apoplexy venesection is indicated not only when the face is cyanosed, the respiration labored and spasmodic, the carotids pulsating and the pulse quick and strong, but also when the patient is unconscious, with pale face and small pulse, as these symptoms suggest impending paralysis of vital centers. Later, when paralysis is most in evidence, bleeding may promote resorption. Mendel advises blood-letting as a prophylactic in arteriosclerosis and in threatened pulmonary bleeding. In pneumonia, when there is danger from overfilling in the pulmonary circuit and venous congestion in the coronary arteries, bleeding may save life, and the sooner it is performed the better, and on the reappearance of danger signals the operation should be repeated. In capillary bronchitis, bronchial asthma, valvular heart disease and disease of the myocardium with disturbances of the circulation, bleeding may be of value, and in a patient sick of Graves' disease with mitral insufficiency, bradycardia, syncopal and epileptiform attacks, Mendel got good results from two bleedings of 400 and 300 cc. The amount of blood that should be drawn is an individual matter; in chlorosis 60-80 cc.; gas poisoning, 200 cc. or more; disturbances of the circulation, 300 cc. or more.—*From Denver Medical Times, excerpt by Wm. J. Baird, Boulder, Colorado.*

GUDDEN ON HOMOSEXUALITY AND CRIMINALITY.—He does not regard homosexuality as a disease or manifestation of degeneracy, even although homosexual individuals

sometimes present evidences of degeneracy, for homosexuality is common in powerful races, such as the Teutons, Anglo-Saxons and Japanese. Gudden considers the condition as an anomaly whose behests must be obeyed by its victim. Two groups may be distinguished, one in which the congenital perversity leads to sexual derelictions without external influences, and another in which the craving is first evoked only through example or suggestion. In speaking of the relation between hermaphroditism and homosexuality Gudden said that the hermaphrodite was not always homosexual. Homosexual individuals show their tendency even in childhood, so that the boys prefer to associate with girls and the girls take part in the rough plays and games of boys. The proportion of purely homosexual individuals may be estimated as from 1 to 5 per cent., including bisexual persons, 2 to 6 per cent., so that of the 56 millions of Germans there are probably over a million homosexual persons in all ranks of society. Such figures certainly justify a thorough investigation of the subject.—*Special Correspondence, excerpt Med. Rec., No. 17, Vol. 72.*

CLINICAL PSYCHIATRY.

THE PROCREATION OF GENIUS.—In the "Genesis of Genius," read at the late Amsterdam Congress on Psychiatry, Dr. Louise G. Robinovitch notes that comparatively few geniuses have been the first-born of their parents. In a study of 74 biographies of great men and women—poets, writers, politicians, painters, and musicians—there were only 10 first-born. Among 42 writers and poets, only six were eldest children; among 17 painters, but one was the first-born of his mother (and a natural child); among 15 musicians, there were only two first-born. These men of genius in a very large number of cases were the youngest or next to the youngest of the family. Coleridge was the last of thirteen; James Fenimore Cooper, the eleventh of twelve children; Washington Irving, the last

of eleven; Balzac, the last of three; George Eliot, the last of four; Napoleon was the eighth, and probably the last; Daniel Webster, the last of seven; Benjamin Franklin was the last of seventeen, and the last-born of the last-born for several generations; Rembrandt was the last of six children; Rubens, the last of seven; Sir Edwin Landseer, the fifth of seven children; Joshua Reynolds was the seventh child of his parents; Carl Maria Weber, the ninth; Richard Wagner, the last of seven; Mozart, the last of seven; Schuman, the last of five; Schubert, the thirteenth of fourteen. The parents, therefore, of great men were, for the most part, of a ripe age at the time of the conception of the latter.

THE SMALLEST MENTALLY NORMAL ADULT BRAIN ON RECORD is reported by Drs. O'Hanlon and Larkin, coroners physicians of New York City. The brain belonged in life to Daniel Ryan, a watchman forty-six years of age. It weighed twenty-four ounces, was healthy and had normally distributed convolutions. Dr. Larkin is adjunct professor of anatomy in the College of Physicians, New York City.

PSYCHOTHERAPY.

NITROGLYCERIN IN THE PSYCHOSES.—(Raymond and Voivenel. *Progres Medical*.) It is assumed that underlying every psychic disease there is an anatomic lesion, perhaps caused by spasm of the cerebral vessels, and this suggests that remedies influencing the circulation may be of value in the treatment of the psychoses and that both psychic and somatic results may be had from nitroglycerin. A dose of only a few drops increases the heart beat, diminishes the blood pressure and dilates the capillaries, causing an increased flow of blood to the brain, that may be proven by an examination of the eye grounds. Nitroglycerin has been used in the treatment of angina pectoris, brain anemia,

neuralgia, dyspnea of contracted kidney and nervous asthma, but not in the psychoses. The two cases reported were: hysterical insanity with auto-suggestion and climatic melancholia. Nitroglycerin better both psychic and somatic conditions. The solution used was: alcoholic solution of nitroglycerin (1 per cent) 5.00 tinct. capsici 7.50 aq. menth, 15.00. Sig. Two drops morning, noon and night.—*William J. Baird, Boulder, Colo. Abstract in Denver Med. Times.*

NEUROSEMIOLOGY.

TRYPANOSOMES AND DISEASE.—In the *Western Medical Review* there appeared at the beginning of 1907 an interesting and valuable contribution by Doctor Henry B. Ward of the University, on this subject which we had expected before now to have seen copied in a dozen or more contemporary monthlies and weeklies, especially in the *A. M. A. Journal*.

The conclusion of the author gives a hint of the importance to medical science and we here quote it: ". . . . Certain most recent and as yet incomplete observations indicate that the cause of syphilis has been found in a flagellate organism of the type of *spirochaete*, or at least closely related. It would be natural to expect that this group of flagellates, which contains so many disease-producing organisms that attack lower animals, should yet furnish the explanation of the etiology of human diseases hitherto unexplained. In maladies which are evidently germ-produced, it is more likely that the cause belongs to the unstudied protozoa rather than that the refined technic of the modern bacteriologist has been unsuccessful in detecting the plant germ which produces it. Now that the attention of investigators has been directed to animal organisms as factors in the production of disease, we may confidently expect the development of a new technic, the discovery of hitherto unsuspected organisms and the solution of the etiology of many heretofore unexplained diseases."

NEUROTHERAPY.

BIOLOGY. OYSTER JUICE.—Baylac, of France, gives the composition of the juice of oysters of various origin. The constitution is almost constant for each variety and contains 2 grammes of albumin per litre, urea, phosphates, sulphate, chloride of sodium, and of magnesia, potassa, silica, &c. The quantity of chlorides varies with the locality. Those of Cete contain more organic matters than those of Marennes. The question here is not pure sea water, but an organic liquid.—*Hahnemanian Monthly*.

FOR OBTUNDING THE SMOKE HUNGER (*Medical Bulletin*) Kolomeitzer recommends rinsing the mouth with a one-fourth of one per cent solution of nitrate of silver.

The smoke coming in combination with this causes a gustatory repugnance to tobacco for a long time after.

DRUG ERUPTION CAUSED BY CHLORAL HYDRATE. A paranoiac 42 years of age was given an hypnotic each night, and two successive evenings two grams of chloral, and the second dose was followed the next day by an eruption that, with the exception of the abdomen, thighs, palms of the hands and soles of the feet, covered the entire body. It was maculo-papulous, dark red with small hemorrhages on the legs, vesicles the size of a pigeon's egg filled with serum on the lower jaw and near the ears, and bloody fissures on the lips and the nasal mucous membrane. The acme was reached on the eighth day and disappeared with desquamation. The temperature rose to 39.8° , and there was intense conjunctivitis, oedema of the lids, hemorrhagic bronchitis, at times somnolency, no albumen in the urine. Gregor, Münch. Med. Woch. No. 17, 1907.)—*Excerpt by Baird, in Denver Med. Times and Journal*.

TRANSFUSION.—We are told that the early Egyptians and Greeks practiced transfusion. The first authentic account of a transfusion indicates that the operation was first performed by Dr. Lower in 1666, at the University of Oxford. Dr.

Lower transfused blood from one dog to another after the latter animal had been bled to the death limit. The donee lived and manifested no apparent serious effect of the operation. A few years later Dr. Lower and Sir Edmund King succeeded in transfusing the blood of sheep into the veins of a man. It was not until the early part of the century just closed that it was appreciated, (1) that the blood of the same species, or even of the same genus, may be directly transfused, and if clotting does not occur during transfusion, the blood will remain in circulation, and apparently serve as a perfect substitute for that of the donee; (2) that the blood of an animal not of the same species, whether introduced directly or after defibrination, will undergo hemolysis, the corpuscles releasing their hemoglobin which appears in the urine; (3) that defibrinated blood of the same genus or species may be transfused, the principal danger being, however, that of coagulation on the slightest provocation, because of the very large percentage of fibrin-ferment introduced.

Very recently Crile and his assistants succeeded in direct transfusion, through anastomosis—a technique the result of Carroll's extensive researches. This method has been successfully employed by several surgeons, and the results have been quite satisfactory.

Crile and Pole (N. Y. M. J., Aug. 27, 1907,) have recently experimented to ascertain whether the life of dogs could be prolonged beyond their normal time after bilateral nephrectomy. It was found that direct transfusion in these cases had no material effect on the length or duration of life. The dogs operated upon were all apparently healthy, of various ages, various weights, and had not been given any special routine treatment.

Direct transfusion in cases of severe hemorrhage has been found a very valuable factor in securing the desired results. A most significant field for further research work has thus been presented by Carroll.—*Bulletin St. Louis Med. Soc.*

HISTORICAL HEALING CHEMISTRY.—Dr. Chanler, in his recent popular lecture at Columbia University, spoke of

the transition from alchemy to the application of chemistry to the healing art, which occurred about the time of the Reformation. The science had already done much for medicine; but strange to say it was Paracelsus, whom we are rather fond of denominating a quack, who was the first to express the belief that the only hope for the art of healing lay in chemical means for combating disease.

A biography of this Paracelsus should bear reading by the practitioner of to-day; it would seem that for his day and generation he was a man peculiarly enlightened and wise in many things. "He taught," states Prof. Chanler, "that the true object of chemistry was not to make gold but to make medicines. He regarded the human body as a co-ordination of chemical materials and processes and believed that when anything went wrong chemical medicines alone would set things right. He occupied the chair of Medical Science at Basle and was celebrated for his wonderful cures." Is there anything more modern than these statements concerning Paracelsus? Are we not now all believing quite as he taught. . . . We say now that living is the body's response to environmental stimuli, either physical or chemical in character; that normal living is the right adjustment of internal relations to external relations. Our disordered metabolism is but a perverted chemism; our unhealthy organs are but chemical laboratories in bad working order; our infections come about through the evolution of germ toxins, the process being largely a chemical one, and for a cure we manufacture and administer such chemical products as sera, antitoxins and the like. It would seem, after all, that the ideas of one age are very like those of another, the difference being largely in nomenclature.

Paracelsus employed copper vitriol, corrosive sublimate, sugar of lead, various antimony compounds, diluted sulphuric acid, sulphuric acid sweetened with spirits of wine, tinctures of iron, various essences and extracts and laudanum; and after him other great *latro*—or healing chemists, such as Libanius, Von Helmont and Glauber evolved many substances which we cannot spare from our pharmacopœia to-day.—*Medical Times Editorial*.

THE INFLUENCE OF SALICYLIC ACID UPON URICOLYSIS.—L. B. Stookey and Margaret Morris (*Journal of Experimental Medicine*, May, 1907), report the results of some experiments in which they found that the liver and other tissues of dogs which had been given daily doses of salicylic acid for some time, destroyed uric acid more readily than the corresponding tissues of dogs which did not have the salicylic acid.—*The Doctor*.

TEA AS A CAUSE OF CHILD BRAIN STUNT IN DORSET COUNTY, ENGLAND.

(Abstract from Dr. P. W. Macdonald's presidential address before the British Medico-Psychological Association, July, 1907.)

The father, mother, son, daughter, and even the suckled infant, all share alike from the ordinary fare of black tea, bread and cheese, morning, noon, and night. This is no colored picture, it is the simple truth. If the beverage tea were properly prepared, and not indulged in too freely, no harm would be likely to accrue; but what will be said of the ordinary laborer who consumes daily two to three quarts of black tea thus prepared? A brew is made between 5 and 6 a. m., and this same pot continues in use by being added to from time to time during the working day, until at last it is little else than rank poison. The fact that this tea is without either sugar or milk, being what is familiarly known in Dorset as "stark naked," makes things worse, and I am convinced is in many cases the cause of insanity among the laboring class. I am not decrying tea in its proper place, but the evils of tea-drinking among the working classes have to be reckoned with in any attempt to probe deeply the causes of insanity. As a nation we consume six times as much tea per head as any other European country. This innutritious diet must lead to impaired nutrition of the nervous system, and as has been pointed out by the Irish Board of Lunacy, "when acting over many generations may have developed those neuropathic and psychopathic tendencies which are the precursors of in-

sanity." Facts of this nature may lend color for the demand for free breakfasts to certain classes of school-children, and whoever has visited the typical village or town school could not have failed to observe the number of dull, stunted and neurotic children. In the course of my inquiries I found as many as 15 *per cent.* of non-educable children in village schools, and the percentage of dull and backward ran as high as 35 *per cent.* Well might the author of *Physical Efficiency* say: "The towns will soon call in vain; for in place of being robust and healthy, the children of the rural districts will often be found to be stunted and in a worse plight than the city children." With these evidences of brain poverty and physical defects looming large before us we might be tempted to agree with the learned professor when he advises us to throw beer, spirits, tobacco, tea, and coffee into the Atlantic as unnecessary and that the race would be better for it. Whether this advice will ultimately prove to be a panacea time alone will show, but it would certainly solve many of the problems with which philanthropists, physicians and politicians have to deal.

NEUROSURGERY.

ON THE PARATHYROID GLANDS, AND TETANY FOLLOWING THEIR REMOVAL.—It is only within the last few years that the nature of the parathyroid glands has been fully appreciated, and their role in the production of tetany after operations for goitre recognized. In a recent paper, H. M. Evans (*Ann. Surg.*, Phila., 1907, October) reports the results of a series of observations carried out on the human subject with regard to the blood supply of these glands. His conclusions are—That the parathyroid glands are always supplied by definite parathyroid arteries which enter them in each case at the hilus; that the parathyroid arteries, superior and inferior, usually arise from the inferior thyroid artery, but frequently they take origin from an anastomosing channel between the inferior and superior

thyroid vessels; few, if any, direct vascular connections normally exist between the parathyroid glands and the connective tissue envelope of the thyroid.

As a supplement to Evans' paper, Halsted contributes some observations on the preservation of the parathyroid glands in operations upon the thyroid lobes. The glands are situated on or very near the posterior border of the lateral lobe of the thyroid gland and more or less in line with the channel of an anastomosis between the superior and inferior thyroid arteries. By following the "sub-capsular" method of removing the thyroid, as recommended by C. H. Mayo, the parathyroids, together with their arteries of supply, may be saved. As it is usually in the control of hæmorrhage that the parathyroids are sacrificed, Halsted describes how the vessels should be secured so as to conserve the parathyroid vessels.

Eugene H. Pool, in reporting a case of tetany parathyreopriva (*Ann. Surg.*, Phila., 1907, October), discusses very fully all the aspects of the subject. The practical deductions he draws are that in operating for goitre it is not merely sufficient that enough thyroid tissue must be left to prevent the occurrence of myxædema, but also that a definite part of the thyroid must be retained in order to ensure sufficient parathyroid tissue being left to guard against tetany. The operator must attempt to leave at least two of these bodies *in situ* with their blood supply unimpaired. It is therefore necessary to leave the posterior part of at least one lobe of the thyroid, in connection with which two of these bodies usually lie. Whether this is done by leaving one lobe completely or in part, is a matter for individual choice in a given case; but in pursuing either course the thyroid vessels, especially the inferior, on this side should not be ligated. In removing the other lobe the dissection should be carried as close as possible to the capsule of the organ, and in ligating the inferior thyroid on this side care should be taken to avoid the parathyroid gland which lies in close proximity to it.—*Alexander Mills' Comment in Edinburgh Medical Journal.*

REVIEWS, BOOK NOTICES, REPRINTS, ETC.

COSMETIC SURGERY, By Charles C. Miller, M. D., Oak Printing Co., 9 Wendell St., Chicago.

The author shows some excellent results, especially in cosmetic surgery of the ear, the unsightly and noncommendable outstanding and other featural stigmata of psychic blemish.

The author offers many operative suggestions and has many procedures for making the facially distorted appear better looking. The book is far from complete and does not discuss much of the ground already gone over in the books on surgery, but the little work is nevertheless commendable.

The author says: "In this volume my effort has been to explain as concisely as possible the numerous operations which I have found useful in treating featural imperfections. There is to-day a well established demand for skillful featural surgery and I feel that I can do the profession no greater service than to offer them the results of my experience."

The surgical profession is making its beneficial advanced mark in this as in other directions in keeping with medical progress generally.

THE NAUHEIM TREATMENT OF ACUTE AND CHRONIC HEART FAILURE—Report of the Seventeenth and Eighteenth Cases of Coccidioidal Granuloma-Remote Effects of Tonsillar Infection, by Philip King Brown, M. D.

THE SEMI-INSANE AND THE SEMI-RESPONSIBLE, by Joseph Grasset, American edition translated by Smith Ely Jelliffe, M. D., Ph.D., visiting Neurologist to City Hospital, New York, etc.

The eminence of the author and the high standing of the translator as a discriminating psychiatric and neurologic literateur justify our commendation even without critical examination and a careful reading confirms the preconception of the merit of this valuable book. A study of the insanoids is in the line of all neurological and psychological investigators.

This book is published by the Funk & Wagnalls Company, 44-60 East Twenty-third Street, New York. Its work will appeal to physician, alienist, lawyer, and layman alike.

"Society knows to-day," as the author says, "that, if it has any rights in connection with criminals, it has also duties toward the diseased. And, further, in the presence of a misdemeanor or a crime it ought to put the question, Should the accused be punished or should he be treated? The object of this book is to demonstrate that to this burning question the magistrate, assisted by the physician, may make three different replies according to the case in hand: (1) The accused criminal is entirely responsible; he has normal psychic neurons, therefore he ought only to be punished and put in prison. (2) The accused criminal is entirely irresponsible; his psychic neurons are wholly diseased, therefore he ought only to be treated and placed in a hospital. (3) The accused criminal has attenuated responsibility; his psychic neurons are not normal, but are partially diseased, therefore he ought to be both punished and treated. He should be placed successively in a prison and in a hospital."

The book is octavo, cloth, 415 pages. Price, \$2.50 net; postage, 18 cents extra.

URIC ACID AND ITS CONGENERS, by George A. Gilbert, M. D. The subject here treated in an interesting and instructive manner, the increasing interest to the medical profession of this subject makes a valuable addition to the literature.

The investigations of the author and his treatment of the subject are in some respects original and should prove attractive to the student of this always interesting feature of morbid deposition and display.

The book is worthy of the commendatory mention which we take pleasure in giving to it. It is worthy a place in the physician's library along with Hays' classic treatise on the subject.

The author is physician to the Danbury hospital, a former fellow of the New York Academy of Medicine and member of the regular medical societies of his state. The book emanates from the Danbury Medical Printing Company of Danbury, Connecticut.

MANUAL OF PSYCHIATRY, by J. Rogues De Fursac, M. D. Authorized translation from the French by A. L. Rosanoff, M. D. Edited by Joseph Collins, M. D., New York; John Wiley and Sons, London; Chapman and Hall, Limited, are the publishers.

The author thinks to the practical alienist the advantage of Kræpelin's classification over the older ones is very considerable.

The manual is divided into two parts. The first part treats of general psychiatry and comprises a study of the causes, symptoms and treatment of mental disorders, considered independently of the affection in which they are encountered. The second part is devoted to psychiatry, that is to say the study of the individual psychoses. The author devotes a considerable space to general psychiatry, at least as far as the limits of this work would allow, deeming a precise, if not extensive, knowledge of the most important elementary psychic disturbances would seem to be altogether indispensable for a full understanding of the genesis and evolution of the psychoses.

This is an excellent manual for the student and general practitioner and will interest also the advanced alienist and neurologist. It gives an excellent symptomatic analysis of

different psychopathic states and intelligently contrasts them so that the student and novice even may read with profit. It is a good clinical manual of psychiatry by a capable student of the subject and likewise well translated by a capable neurologic and psychiatric clinician. We cordially commend the book.

A BRIEF SKETCH of one of Baltimore's greatest men, Horatio Gates Jameson, M. D., by Henry O. Marcy reprinted from the transactions of the Southern Surgical and Gynecological Association.

Words fitly spoken of a worthy pioneer brother in surgery and medicine "like apples of gold in pictures of silver" by one of the most worthy and capable of the profession's orators.

Few men did so much to give credit to early American surgery as Dr. Horatio Gates Jameson, who from 1820 to 1840 carried the fame of Baltimore, as a seat of medical and surgical research, to all parts of the civilized world.

THIRD ANNUAL REPORT OF THE HENRY PHIPPS INSTITUTE FOR THE STUDY, TREATMENT, AND PREVENTION OF TUBERCULOSIS, February 1, 1905, to February 1, 1906. An account of the work of the third year, a continuation of the report on the Maragliano Serum Treatment, a statistical study of the influence of the Henry Phipps Institute on the death-rate from tuberculosis in Philadelphia, and a report of some of the scientific work done by members of the staff of the institute during the year. Edited by Joseph Walsh, A. M., M. D. Published by the Henry Phipps Institute, 238 Pine St., Philadelphia.

This is a painstaking, instructive and exceedingly valuable report. The chapter devoted to neurological work with its post mortem illustrations of the neuropathological anatomy sequent to tuberculosis invasion will prove of especial interest to alienists and neurologists.

ON THE COST TO THE STATE OF THOSE IN PUBLIC ASYLUMS SUFFERING FROM THE RESULTS OF VENEREAL DISEASES, by Dr. C. B. Burr, Medical Director Oak Grove Hospital, Flint, Mich., in *Detroit Medical Journal*.

A statistical contribution of much psychiatric value, limited to those of acquired syphilis in its relation to insanity. No estimate is attempted of those numerous cases of psychical degeneration, the effect of hereditary syphilis, or, on the other hand of the remote or immediate effects of gonorrhea, that frequent cause of pelvic disorder in the woman, leading to breaking down of the nervous system.

A number of years ago when Dr. Burr was an assistant physician in the asylum at Pontiac, a minstrel troupe gave an afternoon performance for the benefit of patients. After the entertainment the company was shown about on the wards. Passing through the infirmary the attention of one was attracted by the wretched appearance of certain patients. "What is the frequent cause of conditions such as this?" he inquired. "Syphilis," said Dr. ——. The word had hardly issued from the Doctor's lips when the one who had asked the question fell in a faint to the floor. He had had his object lesson but it came too late. The alienist, the neurologist, the general practitioner, the public sanitarium, the legislator, jurist and philanthropist may glean wisdom from this paper.

THE ANNALS OF OPHTHALMOLOGY for July, 1907, like the Annals of Otolology founded by the late James Pleasant Parker and edited by William T. Shoemaker and C. W. Parker, associate editor, is before us carrying a valuable table of contents attractive to alienists and neurologists. A portrait of William Thomson faces the Annals of Ophthalmology and a biography of this eminent professor of ophthalmology in Jefferson medical college follows.

THE SEPTEMBERANNALS OF OTOTOLOGY, RHINOLOGY AND LARYNGOLOGY is unually interestingto alienists and neurologists because of the subjects treated and illustrated upon conditions connected with the cause

of so many brain diseases. It is edited by H. W. Loeb, M. D., with an associate corps of equally able collaborators.

Both of the above annals are St. Louis periodicals, having on their staffs inedical men of eminent merit throughout the world.

They were founded by a worthy and meritorious medical man of St. Louis and are posthumous memorials of his ability and energy. The first is edited by William T. Shoemaker, M. D. and the second by H. W. Loeb, M. D.

RECREATION published by Outdoor News Company, New York, sheets of excerpts come to our table occasionally showing the value of this publication for seekers after relaxation to those who would save their health. An occasional copy also comes to us. We commend what we have seen of it as we would advise an ounce of prevention worth a pound of cure.

THE SCIENTIFIC WORK of the Insane Department, New South Wales, (Inspector General's report) during the year, 1907, and the Pathological Laboratory at the University have been worked in connection with the Callan Park Hospital where a special series of clinical rooms, laboratories, &c., were fitted up some time ago. The laboratory has been thus enabled to avoid the error of confining its work too strictly to histological research, and placed in a position to carry out investigations in connection with the processes in the living body. The work thus accomplished will be published in the reports of the Pathological Laboratory. But in this report reference is made to the investigations of the changes in metabolism in patients under treatment by thyroid extract, and of the determination of the occurrence of diphtheroid organisms in general paralysis.

REPORTS OF THE STATE COMMISSION IN LUNACY are always interesting to the alienist and neurologist and students of psychiatry should secure and preserve them for reference. The same is true of the excellent Insane

Hospital reports. Decided improvement is shown in the instructive value of the matter in these documents during the last decade over previous years.

THE ALBANY MEDICAL ANNALS announces for February the novelty of a medical serial by Dr. Everett Flood, of the State Hospital service, of Massachusetts, and Dr.

A. R. Moulton, of the Pennsylvania Hospital for the Insane, reciting the personal experiences of a patient during an attack of insanity of several years' duration. The memory of the patient is pronounced perfect; and the record authentic. An opportunity is thus given for study of the subjective mental state, of the correctness of methods of management, and of the reactions upon the patient for good or for evil of the environment. This story appeals to all classes of readers, and will be of special value to physicians. Alienists have often heard similar experiences detailed to them and some times have been surprised at the consciousness and memory revealed of presumably oblivious or indifferent mental states. The editor of the ALIENIST AND NEUROLOGIST recalls more than one instance of silent negative forms of insanity which might by some be called dementia praecox which surprised him by recovery and recollection of occurrences and personal experience wherein before recovery the patient made no speech or sign.

Blastomycosis and Its Congeners; Report of Eight Cases Observed by the Writer in Indiana. By Alembert W. Brayton, A. M., M. D., Indianapolis, December, 1907.

Comptes-Rendus Du Deuxième Congrès International L'Assistance des Aliénés, Milan, 26-30 Septembre, 1906. Bologna, Stabilimento Poligrafico Emiliano, (s. p. e.) Piazza Calderini 6, Palazzo Loup, 1907.

Fifty-Seventh Annual Report of the State Lunatic Hospital at Harrisburg, Penn. For the Year Ending September 30, 1907.

The Physician's Visiting List for 1908. P. Blakiston's Son & Co., Publishers, 1012 Walnut Street, Philadelphia. Good as ever.

Report of the Department of Sanitation of the Isthmian Canal Commission for the Month of October, 1907. W. C. Gorgas, Assistant Surgeon-General, U. S. Army, Chief Sanitary Officer. Show splendid sanitary progress in Yellow Fever and Black Water Fever Elimination.

Preliminary Announcement of the International Congress on Tuberculosis to be held at Washington, D. C., U. S. A., September 21 to October 12, 1908.

The One Hundred and Tenth Annual Report of the Board of Managers of the Maryland Hospital for the Insane near Catonsville, Baltimore County. To His Excellency the Governor of Maryland, November, 1907.

Thirty-Seventh Annual Report of the Central State Hospital of Virginia, (Petersburg) for the Fiscal Year Ending September 30, 1907.

La Réforme des Asiles D'Aliénés; L'Assistance des Aliénés En France, en Allemagne, en Italie, en Suisse et en Belgique par Le Docteur Jul. Morel.

Remote Effects of Tonsillar Infection. Philip King Brown, M. D., San Francisco.

Fifty-Sixth Annual Report of the Board of Trustees and Superintendent of the Central Indiana Hospital for Insane. For the Fiscal Year Ending October 31.

A System for the Surgical Correction of Harelip and Cleft Palate. Geo. V. I. Brown, A. B., D. D. S., M. D., C. M., Milwaukee, Wis. This is one of the best contributions to this subject extant and its author one of the best of American operators for this trouble.

Report of a Case of Traumatic Diplegia—Operation—Benefit. By William S. Deutsch, M. D., St. Louis, Mo.

The Physiological Study of a Case of Migraine. By Shepherd Ivory Franz.

Saunders' Illustrated Catalogue of Medical and Surgical Books. Saunders' Text Books continue to gain in popularity. Revised November, 1907. Philadelphia and London. W. B. Saunders Company. The illustrations are classic, works of art and the entire catalog worthy of a place on any physician's or surgeon's table.

Relations of the Doctor to the Alcoholic Problem. By T. D. Crothers, M. D., Hartford, Conn.

A Sanitarium Vacation, Being a Retrospect and an Appreciation.

Coccidioidal Granuloma. Review of the Eighteen Cases and Reports of Cases Fifteen and Sixteen. Philip King Brown, M. D., San Francisco.

Mucous, Mucomembranous, and Membranous Colitis. By James P. Tuttle, M. D., New York.

Instrumental Examination of the Rectum for Malignant Growths. A New Proctoscope. Some Suggestions on the Palliative Treatment of Inoperable Growths. By James P. Tuttle, M. D., of New York.

Formidine. (Methylen disalicylic acid iodide.) An Odorless Substitute for Iodoform and a Safe and Powerful Internal Antiseptic. From the Laboratories of Parke, Davis & Co., Detroit, Mich. A good substitute.

After-Care of the Insane. By William Mabon, M. D., Superintendent and Medical Director, Manhattan State Hospital, Ward's Island, New York City.

Abstracts of a Year's Contributions to Internal Medicine. By G. W. McCaskey, M. D., Professor of Medicine and Clinical Medicine, Purdue University; Physician to Hope Hospital, Fort Wayne, Ind.

Nonoperative Treatment of Gastric Diseases. By Fenton B. Turck, M. D., Chicago.

The Nauheim Treatment of Acute and Chronic Heart Failure. By Philip King Brown, M. D., San Francisco.

Cereus Grandiflorous and Cactina Pillets. Medicinal Value.

Paralysis of Divergence. By Alexander Duane, M. D., New York.

The Prevention of Deformity After Infantile Paralysis by Recumbency During the Stage of Recession. By Adoniram B. Judson, M. D., New York.

The Procreation of Defectives. By A. A. Merrill.

Modern Iron Therapy. By Reynold Webb Wilcox, M. D., LL. D.

Prophylaxie et Traitement des Criminels Récidivistes par M. le Dr. Jul. Morel. Médecin-directeur de l'Asile d'aliénées de l'Etat, à Mons.

Peritoneal Tuberculosis. By Parker Syms, M. D., of New York, Surgeon to Lebanon and to Sydenham Hospitals. Read before the New York Surgical Society, March 13, 1907.

The Alienist in the Courts of Law. By R. W. Shufeldt, M. D., Major, Medical Department, United States Army (Retired), New York City.

La Situation Financière des asiles d'aliénés par le Docteur Jul. Morel. The contributions of Doctor Jul. Morel have always been meritorious and acceptable to the profession.

Syphilis, Past and Present; Its Birth and Origin; Literature, Symptomatology and Curability; Its Relation to Marriage; Innocent Syphilis and Social Prophylaxis. By Nelson D. Brayton, A. B., M. D., Government Physician to the Isthmian Canal Commission, Panama.

Vacation Memoirs, 1907, By Flavel B. Tiffany is an interesting account of the trip of Fassett's party to and from the A. M. A. last year given as an address to the University Medical College Class of 1907-8.

The Presidential Address Delivered Before the Medico-Psychological Association of Great Britain and Ireland, July 25th, 1907. By P. W. MacDonald, M. D., President, Resident Physician and Superintendent, County Asylum, Dorchester.

Abdominal Surgery Without Detached Pad or Sponges. By H. S. Crossen, M. D., Clinical Professor of Gynecology, Washington University, Gynecologist to Washington University Hospital and Chief of Gynecological Clinic, St. Louis, Mo.

The Treatment of Trifacial Neuralgia by Means of Deep Injections of Alcohol. Report of Sixteen Cases. Hugh T. Patrick, M. D., Clinical Professor of Nervous and Mental Diseases, Northwestern University Medical School; Professor of Nervous and Mental Diseases, Chicago Policlinic. Chicago. This paper makes a good therapeutic showing. The author has been remarkably successful.

Amebic Dysentery, Its Local Lesions and Treatment. Read at the Fifty-Fifth Annual Session of the American Medical Association, in the Section on Practice of Medicine, and approved for Publication by the Executive Committee: Drs. J. M. Anders, Frank Jones and W. S. Thayer. By James P. Tuttle, M. D., Professor of Rectal Surgery, New York Polyclinic, New York City.

The Sleeping Canopy and the Need of Such Means of Ventilation. By Charles Denison, A. M., M. D., Emeritus Professor of Diseases of the Chest and of Climatology, Denver University, Author Rocky Mountain Health Resorts, the Climates of U. S. in Colors, Exercise and Foods for

Pulmonary Invalids, etc. Denver, Colo. This is copyrighted 1907, by the American Medical Association. We do not understand why—it is the description of an appliance and the code enjoins that patents of means of relief should not be taken. Like all of Dr. Denison's contributions it is meritorious. The use of the sleeping canopy should be promoted for the welfare of mankind without let or hindrance. We are pleased to note that copyright instructions are not observed in sending out this valuable brochure.

Ulcer of the Stomach: Pathogenesis and Pathology. Experiments in Producing Artificial Gastric Ulcer and Genuine Induced Peptic Ulcer. Fenton B. Turk, M. D., Chicago.

The Treatment of Chorea Minor. D'Orsay Hecht, M. D. Assistant Professor of Nervous and Mental Diseases, Northwestern University Medical School; Consulting Neurologist to the Cook County Institutions for the Insane at Dunning, Ill.; Attending Neurologist to the Michael Reese and St. Elizabeth Hospitals. Chicago.

The Methods and Technic of the Deep Alcohol Injections for Trifacial Neuralgia. By D'Orsay Hecht, M. D., Assistant Professor of Nervous and Mental Diseases, Northwestern University Medical School; Consulting Neurologist to the Cook County Institutions for the Insane at Dunning, Ill.; Attending Neurologist to the Michael Reese and St. Elizabeth's Hospitals. Chicago.

On Pyroligneous Acid and Its Internal Use in Arthritis Deformans. By Louis Kolipinski, M. D., Washington, D. C. Member of the American Therapeutic Society. Read at the Annual Meeting of the American Therapeutic Society, Washington, D. C., May 4-7, 1907.

A Case of Disordered Personality. By Richard Dewey, A. M., M. D., Wauwatosa, Wis., October-November, 1907. Showing an incomplete alteration of consciousness of sixteen

days' duration in a girl of twenty-three, with assumption by the patient of name of another person and a total change of handwriting, the same being reversed both vertically and laterally; the state of altered consciousness being preceded by several months of pseudo-paranoia—apparently an evolution of systematized delusions, which were taken for facts, however, by her associates,—probably a hysterical or histrionic fabrication of the patient. Previous history of migraine, hysteria and erotomania, of homo-sexual character.

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No. 2.

RESTRICTED PROCREATION.

INTRODUCING A REVIEW OF ROBINOVITCH AND
OTHERS ON SPECIFIC HUMAN ENERGY.

BY C. H. HUGHES, M. D.

ST. LOUIS.

WHILE he of the strenuous life and noble impulse, notes with condemnation and regret the tendency to race suicide, but with inadequate qualification, we desire to repeat the record the *Alienist and Neurologist* has sought to make in the direction of commendation rather than condemnation of the prevention of the pre-natal suicide, if one chooses to call it so, of the unfit to live, who have yet the procreative power, but can propagate only degeneracy and disease.

The prevention of conception in certain families means the aversion of generations of misery, crime or folly in generations that would follow. One of the inexplicable mysteries connected with the continuation of the human species, is the permission, by laws of Nature, of the perpetuation of defects by unregulated procreation—the vicious and deformed in mind and body are too often perpetuated after their kind. Morel's table of criminal insane and imbecile degeneracy from original immorality and inebriety and the records of the idiotic Jukes and other families of defectives, fatal to the welfare of society, are standing and potent rebuke and protest against the indifference of mankind to the propaga-

tion of that unfit kind whose ways of life from abnormal organic hereditary impulse, must lead only to family and society injury. Nature is profligate with the germs of life, being careful only of the type.

A symposium on the treatment of the criminal and other social parasites was held at the joint meeting of the Physicians' Club and the Law Club of Chicago at the Great Northern Hotel, Dec. 16, of last year, in which elimination of criminal children by sterilization was advocated, and treatment of criminals over thirty years old as habitual malefactors and either sending them to penal institutions for life or putting them away in some other legal manner.

Dr. William T. Belfield was the advocate of the sterilization idea. He took up the biological aspect of the criminal, and after tracing the development of the individual to the point where he became a danger to society, made a plea for race suicide by asexualization.

"Murder, insanity and degeneracy are increasing at an alarming rate," he said. "Our American system of civilization is inadequate to meet the problem of the social parasite. The ignorant hordes of serfs from southern Europe and Africa have swelled our electorate with those whose ideals are linked with vice and crime. They are filling our city offices with criminals and cementing the alliance between authority and vice. This crude civilization founded on autocracy has come into our democracy during the last twenty-five years.

"Divorce has increased in the same ratio as murder. High finance has developed. The law fixes the punishment of the criminal not according to the danger to the community, but to the individual. The application of the laws of crime is farcical. From a record of the Bureau of Identification I find a colored man fined \$85 for trying to assault three little girls.

"Morality is the arrest of the instincts by intellect. A child is a savage. If he continues to improve slowly he has a chance to outgrow his tendencies before he is thirty. Before that he should be given all the care possible. But when a man commits a crime after thirty he may be set down, as a rule, to be morally bad with no hope of improvement. For the

mature criminal I would advocate permanent segregation either by the penal colony or the cemetery. The indeterminate sentence with the parole is a radical error for the man over thirty." Better asexualization before the cemetery.

Dr. J. N. Hurty, secretary of the Indiana State Board of Health, told of the "Indiana movement," which is the education of the prisoners in the Indiana Reformatory to allow themselves to be sterilized. More than 300 of them have submitted to this operation so far. The criminals are told who they are and why they are, and after an examination is made of the mental status of the criminal to determine what his chances of improvement are, the operation is performed. Dr. Hurty also told of the operation of the law under which marriage licenses are given.

The Indiana Medical Journal thought enough of this important report to select it for reproduction in its pages and we have deemed it worth transcribing.

In a world where so many forms of organic degeneracy and morbid contamination are diffused among the people (syphilitic, alcoholic, gonorrhoeal, tuberculotic, neurotic, neuropathic, etc.), the question that confronts us with hesitation, apprehension and horror, is rather how shall we conserve the yet sound organisms, than diffuse and propagate the unsound and unfit to further continue their defective and degenerate kind upon a world already overburdened with degenerates. What this world needs is more human engines of normal energy, psychical, mental and moral. Every human being represents, as Mm'selle Louise G. Robinovitch has forcefully expressed it, "a certain quantity of potential energies, the greatest part of which is developed and utilized in the direction of genesiatic function." "The destiny of man is similar to that of every living cell—to live and reproduce itself." "It is natural therefore" she says "to hear a peal of alarm arise when the likelihood of a progressive decrease of reproduction manifests itself in any given nation."

All agree that desirable population should be increased and all must, at least, concede the undesirability of eliminating the imbecile, the idiotic, the insanely and otherwise

congenitally predisposed defectives and incapables from among a people who would stand strong before the world in good and great accomplishment for their protection and for the welfare of the world. But a high birth rate, as Robinovitch says, "without some definite qualification should be well scrutinized before it is acceptable as a desirable national feature." "Limitation of offspring" as she quotes from Dr. Gihon, "in a community where there are two million active syphilitics, to say nothing of the other millions unfit for procreation, is often a duty, but fetecide is not its ethical method."

Dr. Alder Blumer, the superintendent of a hospital for the insane and Dr. M. W. Barr, the superintendent of an institution for imbeciles, are quite in accord, as are alienists and neurologists and all students of morbid cerebropsychology, in favoring legislation for the restraint of reproduction of unfit mental defectives. The experience of Dr. A. W. Wilmarth of Wisconsin, superintendent of the State Home for the Feeble Minded and Kiernan and all others of similar experience, confirm the fact that defectives are not favorable to race suicide, but prone to plentifully propagate their kind, who have died or are dying out in the highest centers of psychic power. There are circumstances under which the propagation of a human life may be as gravely criminal as the taking of a life already begun and this is only presenting in another and similar phase the view of Blumer, quoted in Robinovitch's valuable contribution, viz.: that "the making of a human life is as serious as the taking of one."

Procreation is restricted among some of the economically prudent, according to Dr. Roland Curtin, because of the high price of accouchement and trained nurse service and among the rich and intensely social for selfish considerations of personal convenience, comfort and pleasure. A census, he states, in one of the wealthiest wards of Wilkesbarre, Pa., revealed but a single birth in six months. In another section not even one birth was recorded.

This paper of Robinovitch on which we have so freely drawn and which was read at the Rome Congress of Psychology in 1905, by the talented editress of the Journal of Mental

Pathology, has not attracted the general attention its merits, as an original contribution and summary, have deserved.

Procreation is a grave responsibility. Its product is a new unit of energy to the community. If that energy be sexually degenerate, defective and destructive, its product had better be *nil* and absolutely, not partially impotent, for the good of the world. Paeans sung to procreation and anathemas to prenatal race suicide should be pitched to the proper race conserving key or not sung at all. Prenatal race prevention of the propagation of the unfit is a virtue and not a vice.

The energy of propagation is misdirected and had better be restrained, if it brings forth only degeneracy and therefore vital unfitness. And here we introduce and repeat again from the most suggestive, forceful and timely essay already quoted:

"Nations have not yet elevated the energy of genestic function to the dignity of an energy. Other energies known to us, even of the meanest grade, have long since been wisely utilized and their activities based on the principle of the strictest possible economy. This economic utilization has been brought about not through any enforcement of legislative restrictions, but through steadily progressive human intelligence. Economic handling of genestic function will, like the economic function of other energies, come about through a steady and progressive intellectual development of nations." (Robinovitch.)

Many obvious suggestions follow upon this final and novel settlement of fact. One of them is ample provision by the state of accouchement facilities and state bourne expense, not for acknowledged paupers, but as a premium upon procreation of non-defective human beings by parents who show the requisite non-defective, organic stamina for the parentage of offspring who will give promise of help and not harm to the commonwealth and that the race in part of their progeny may evolve into the possibilities and responsibilities of higher manhood or womanhood.

A pure food law has passed from a mere possibility to a realized fact. Why not state encouragement of and provision for physically and psychically pure citizens? We

restrict immigration because of disease and defect, why not restrict the propagation of defectives among ourselves rather than encourage their harmful multiplication among us?

It were better that the eroto-psychopathia engendering seed of the Sodomite die in fecal rectal receptacle or that wombs were fast closed to such, as to the house of Abinelech in bible story, against another purpose, than that such germs should fructify unto erotopathic degeneracy and dishonor in new beings conceived in utero.

Lot's proposition, it may be here remarked, to give to the perverts of Sodom his virgin daughters, giving them to normal lust in lieu of the Sodomy they sought to accomplish, would not be approved by modern psychology, nor would Lot's daughters' method of perpetuating the family name be countenanced, though no epilepsy or other marked psychopathy is recorded as having followed the unconscious and involuntary inebriate incestuous communication, though the Ammonites, however, with their fire god Molech and human sacrifices thereto, appear to have been abnormally pyrophiliac.

The fire and brimstone that rained death from heaven on the persistent Sodomites, was not race suicide, but it accomplished the same salutary purpose against such race contaminations. It was heaven decreed death according to the record, of the unfit to live and propagate their unfit degenerate kind.

Here is a new vocation for the state, aided by wise medical counsel, for the determination of the fitness or unfitness of two beings by copulation to bring forth a third to become a supporter of self and state and a normal political constituent thereof or an unfit being to burden the state and the family. To avert psychic calamity to a community by preventing the wrong sort of offspring, is better, wiser, more humane and more profitable to family and state than the Spartan method of post-natal extermination or otherwise putting aside as we now do with defectives thrown upon the state for public support.

There is another source of race suicide not quite so germane to our subject as the foregoing matter, wherein Nature herself saves the integrity of the race by life prevention and

wherein, in contrast with the sun that shines benignly on the just and the unjust alike, the blow of disease falls destructively on the sinless and the sinning, often with greater force on the innocent. I allude to the disease contracted by the man giving the woman a salpingitis which makes her barren and also that other twin venereal scourge that destroys progeny or unfits it for right development into healthful life.

While the novelty of this subject and the method of its treatment may provoke a smile of amusement in some, it is nevertheless serious enough in its relation to the mental integrity and perpetuity of good peoples and governments, to challenge the most serious consideration, with efforts at correction by the mentally stable and duly thoughtful physician, philanthropist and patriot.

THE STATE AND SYPHILIS.—It is now being urged in many countries by the leaders of medical opinion and social reform that governments should take steps to control the spread of syphilis. This disease is the cause of a vast amount of ill-health, and is responsible for many deaths. In the British army it costs the nation about \$15,000,000 annually for sickness and about \$20,000,000 in pensions and superannuations, or a total of \$35,000,000 a year. The disease may be considered from the moral, social and legislative standpoints. The first of these comes more within the range of the church, while the second is one that the medical profession should interest itself in. By legislation the governments of countries might do much by arranging for lectures, the distribution of tracts and the providing of places where syphilis might receive proper treatment. It is certainly a serious blot on our modern civilization that this disease should have free scope to afflict the innocent and guilty alike.

The story of Ross and Edward in the *Medical Fortnightly* for Oct. 10th last, would be approved reading in this connection.

GERMAN CAMPAIGN AGAINST VENEREAL DISEASES.—According to a recent decree of the authorities of Berlin and Charlottenburg, Germany, lectures on hygiene, including sexual hygiene, are to be given regularly in the high schools

(gymnasia). The German high schools include part of the college course. The Prussian cabinet has also ordered that instruction in regard to the perils of venereal diseases be imparted to students in the higher institutions of learning. In Darmstadt, the teachers have been ordered to inform the parents of the lectures and to invite them to attend.

THE PERIL OF THE PSYCHO NEUROPATHIC DIATHESIS.

That other venereal disease to which we have referred in the text as the destroyer of woman's fecundity, happiness and life, quite as formidably claims repressive and eradivative government knowledge and action, even as tuberculosis and other diseases do, but the psycho neuropathic diathesis with its terrible destructive devastation of brains and minds, peopling the insane, idiot, imbecile, inebriate and lunatic institutions and contributing to provide our public schools with backward children, must equally engage popular and official attention if this nation is to be saved.

With enlightened knowledge and resource we now seek to destroy the germs of disease and their carriers, the mosquito, the fly, the flea, the rat, *et id omne genus*, and to purify milk, water and food of disease germs and to destroy other sources and forms of infection and contagion. Why not with like intelligence quarantine against the germs of human degeneracy and decadence?

With scrupulous care the farmer selects his seeds and soil and conducts with equal concern the after care of his growing grain, yet, concerning the seeds and soil of human lives, a strange, unaccountable thoughtlessness too generally prevails. Indifference in this regard too often characterizes human conduct and concern, and conjugal union of creatures who are to engage in the perilous or fortuitous procreation of creatures on whom will devolve the weal or woe of coming generations and the welfare of our states and nations continues as in the days when less was known of the psychopathic peril.

A subscriber asked the editor of a St. Louis city paper to say what is the greatest sin of omission that society is guilty of to-day.

The Editor answered:

"It is in the failure of society to realize and provide for the needs of the coming generation."

What would seem to be the supreme desire of humanity—the nurture and protection of its children—is its supreme neglect.

Laws, for instance, that should provide for the restraint and protection of the young are always lowest on the calendar of the legislator.

Why?

Because of the failure or neglect of this generation to appreciate the value of the next.

When attention is urged, the reply is made that the percentage of children who need the help of the state is small. Even were this true—which it is not—it is the bounden duty of the state to look after this percentage.

Millions of children are being well trained for good citizenship in homes and schools.

Other millions—literally millions—are forced to hard labor before they reach their teens. Other millions are neglected by indifferent, immoral, intemperate or ignorant parents, who roam the streets and engage in every evil.

The state does little for these save to punish them when they are caught.

Take the fact of child labor alone:

It is passing strange that public sympathy should so slowly waken to this monstrous sin.

True, it has few apologists. And in this respect we are better off than during the days of chattel slavery, when its apologists were found in many pulpits. Our sin is spelled in the word neglect.

FIFTY YEARS FROM NOW PEOPLE WILL LOOK BACK UPON CHILD LABOR WITH NO LESS HORROR THAN UPON THE NEGRO SLAVERY OF FIFTY YEARS AGO."

And so it will on the neglect of child heredity and the sin of degenerate propagation.

Byrön, the Thanatophobe, said:

"The skies rain their plagues on men like dew,
Disease, death, bondage, all the woes we see
And worse, the woes we see not. "

Byron had the death fear of the psychasthenic, that he was at times, from the psychic depression of his erratic excesses and his constitutional hereditary defect of physical organism. The woes we see not included his woe of psycho-neuropathic instability and untimely depression and the unseen woes of those unfortunates who have been dowered and born into the world with a fatal psychopathic heritage, unfit to conquer the adverse ills of life and rightly adapt themselves to their environment. Such had better not have been born. They had better have escaped being born into this life, to them, of unequal contest because of their organically entailed infirmity. They had better have escaped through fortuitous race suicide.

ON PHILOSOPHY OF PESSIMISM.

BY ALBERT S. ASHMEAD, M. D.*

NEW YORK CITY.

THE recent suicide of a college classmate of mine at the University of Pennsylvania, Robert Adams, Jr., a congressman from Philadelphia, suggests the question: "Does a philosophy of pessimism lead us to the mad-house and grave?"

Mr. Adams was our Class President at the time of his death and his sad ending recalls the act that he was kind-hearted and a generous fellow. "Adams," "Ashmead!" that was the order of the roll call. But in the manner of his taking off, I shall not follow him for my philosophy is tempered with Spinoza's optimism. In every circumstance of life, we must learn its lesson.

Only abject wretchedness of a mind diseased could have forced the accomplishment of poor Adam's fate.

Always of delicate mold, in body and mind, this suicide felt keenly the threatening change in his environment by his fall from wealth to poverty. The thread of his sanity, finer perhaps than ordinary, strained while he reasoned that all was vanity and vexation of spirit—that life was not worth the candle; here it snapped and broke.

But need one go down to the pit of death in utter despair because of pessimism? More faithful, saner philosophy is saving.

Let us see how its reasoning runs. "I am growing old and dull, I think," says one, who is imbued with this right sort of rationalism, "my eyes are certainly growing dull—seemingly rapidly. Probably both are hopelessly cataractous

*Qualified Examiner in Insanity, State Lunacy Commission, New York.

—perhaps my brain cells are too, for that matter, but as yet, I am unaware of the fact. I have not much interest even in this matter. My view of the law of life, seen through the turbid medium perhaps is well known. ‘He that thinketh he standeth, let him take heed lest he fall.’ The ancient writer of those words understood well the Law of Demolition.”

They say to us: “We hope you are happy.” We should refrain, however, from being happy—it would be a state of illusion, as it has always been with me. Happiness is exaltation, and exaltation is a form of mild insanity. I am truly weary of the world, as weary of it as ever man was. Rasselas states it well—never better said.

Even Ingolsby’s Legends, my old time friend and comforter on life’s rainy days, has no longer other effect than to confirm my view of the utter rascality of mundane existence. I mean this in the fullest nature-sense. I am done with paying any attention to what the self-wise say from the Pulpit and Rostrum. I am able to think for myself and to speak without feeling it necessary to have a theory or to sustain a cult. Rasselas should be an integer in the curriculum of every school, that the oncoming generations may (if possible), learn by its truth, in advance of experience. Yet no amount of prudent thought and carefulness of walk, can circumvent the intent of the Wily God of Eden—the Bright Light of the civilization of the day.

The Kokumin, daily paper of Pagan Japan, of a civilization which does not include belief in Immortality, declares that “in consequence of the prompt recognition by the United States of the protectorate over the Hermit Kingdom, of Corea, Japan disclaims all designs on the Philippines; and she now only desires America to perform her duty of civilizing those islands”—which shows the arrogant Japan. The little yellow man, and the little white man will yet meet in armed conflict under the instigation of the little black man. Evil and good are always at war.

At the time of the General Slocum disaster, June 17th, 1904, Mr. Langdon said: “We read today of the fate of the school children out for a day of happiness. Is this then an

instance of the goodness and loving kindness of God—the most cruel and malignant idol that was ever, and is now, worshiped. Hundreds of children out for an innocent holiday, and He, of whom we are told that He so loved the beings he had created that He gave up to death His only son for their salvation, permits a thousand of them to die awful deaths for believing in Him! When will this terrible fraud end, and men be honest for the sake of being honest?" To this a critic replies: "The mystery of human existence, Mr. Langdon, is insolvable by man."

Whence comes evil and why did it come under the government of the Universe by a personal God, described to us in reputed revelation, as merciful and of exhaustless loving kindness? These are questions which have never been answered and they never will be answered for they are unanswerable by man.

Calamities which have befallen men and communities have often been attributed to their wickedness and their unbelief. The death of Tom Paine used to be described by religious writers as peculiarly horrible because of his infidelity. If the calamity of those school children of the General Slocum had happened to be a crowd of excursionists of evil character and evil lives, the comment of the religious on it might have, and in many instances it would have been, that it was a judgment of God on people so flagrant in their sinfulness. But here was a party made up of men, women and children of a Sunday School, brought up in the nurture and admonition of the Lord, profound in their religious belief, and assiduous in their religious practice, disciples of a church peculiarly strong in its adherence to the strict religious faith of the past. Was this a judgment of God?

The ways of God are past finding out we are told by St. Paul. They are inscrutable. But the ways of Nature are discoverable and preventable. If a child ventures in front of a locomotive, it is crushed. If people live on the sides of a volcano, they are liable to perish in its eruption, whether believers or unbelievers, signally righteous or flagrantly wicked. But here man and man's prudence and science can

step in, ward off and prevent the catastrophe. In our public schools crowded with children, has been perfected a system of fire-drill by which the children, from the least to the largest, are enabled to escape unharmed, in a few minutes, from a fire in the building. If there was no such possible human precaution, great numbers of them would always be liable to destruction.

That is all we know, but we know that thoroughly. We know that we must look out for ourselves, that every precaution suggested by science and by experience must be used to prevent panics and save life in a crowd. We know that all possible measures of safety should be provided and taken on a steamboat loaded with passengers—discipline, constant watchfulness and proper construction—and we know that they can be made successful in their employment, except in those rare instances where the cause of disaster seems as unpreventable as it is undiscoverable.

Mr. Langdon puts on God, the responsibility for the General Slocum disaster, but actually the responsibility was altogether human. Is not God responsible for the laches of his creatures, and how can mercy and loving kindness in Him be reconciled with their suffering and death if they violate Nature's laws?

That is a mystery, Mr. Langdon and the world of civilization (not paganism) is no nearer to its solution today, than was the first savage in the form of man.

Here I observe that in human laches, the human being is not responsible. Laches is the inevitable. Yes, God is responsible.

Quite recently there has been a wonderful revelation of business methods (laches) in this country and in this city; the highest names in business circles are linked with underhand work in a most surprisingly direct way. It furnishes a study. All that treachery, duplicity, secrecy, unconscionable conduct, is paralleled in nature in all her forms. Man is a part of nature. All displayed in that revelation of business methods is of the character of the Mantis* and the Spider;

**Mantis religiosa*—the praying Mantis.

differing only in the higher and more intelligent range of its activities. There will come a time when a sect will be formed to proclaim the views thus held. There is evidence that Max Müller felt it keenly.

"Away with Pessimism!" says Kaiser Wilhelm Second, in a late speech. Yes, away with pessimism; so says the earth. Away with tears and pangs, away with that which makes high ideals unattainable, and brings grief where bright hopes rested. Away with the darkness that clouds the day of life; which causes the sun of life's morning to set in gloom. Away with the rain drops that pour from the heart. Away with that which causes the lisped prayer of childhood to be as the breath of a sparrow against the smothering blast of the desert, or the noxious exhalation of a swamp. Away with that which puts evil in his path and warns him not; which makes evil attractive as a Will'o'the Wisp. Yes! away with pessimism and with all causes of pessimism. Away with the Brooklyn theater fires, away with the Chicago theater fires, and the burning Slocums, whose victims were almost solely women and children; away with railroad and steamship wrecks. Against all these man's forecare fails.

Yes! away with pessimism; away with all that degrades life—and keep it away; away with the destruction of high hopes and of earnest resolves, else pessimism will not away; away with wars; away with massacres; away with sicknesses and agonies from which there is no escape except through untimely death; away with all causes of sorrow and pessimism will away.

Then and then only, may optimism reign supreme and undisputed.

Goldsmith says: "Tremendously difficult that study is when we reflect on the presence in the Universe, and in the life of man, of so much that appears to us evil, and evil in many features of which we can discern no ultimate tendency to good."

Optimism is only a feature of the art-preservative of Nature—we are bidden to keep on until suddenly the law of Determinism ends our activities and we ask if we have really

been conscious that we had been living away our life, pouring it out as though, end though there must be, yet an end always far away.

For individuals, Nature cares absolutely nothing, for neither Prince nor pauper, for neither Pope nor pariah—under certain conditions each might well have been the other.

Optimism is only a form of Energy, pessimism is a condition where Energy is weakened by fruitless effort. Each may be inherited—is inherited in various degree; and each individual is involuntary in all the main features of his life. Even the fortunately gifted one, perhaps a writer, artist, educated engineer, traveler, wealthy and calm, and of high brain power, we are indebted to him—him the Involuntary.

"I now understand life," says a pessimist. "God as represented by the law of the face of the earth, has no conscience, and man is ever engaged in undoing His evil work. The story of Eden is plain—born and blasted in a day. Bah! And we are made to go around and blame one the other! That is the meanness of the scheme. I have overflowed with life—I know it all.

"All quick sands! Thus is contributed something to the subject generally, of the fixed principle of evil in Nature, from a dejected Moral State, arising from a review of six decades of life upon this earth—as to which I can abbreviate by referring to all my expressions upon the subject, not omitting those more optimistic of life's yesterday. Nature is an immense industrial factory, run by a Master who has no conscience—who keeps all in a matrix, a mold. There is no a truism except that which is in higher man.' Those little six decades of his life overbalance all the wisdom of the world before he was born.

On this great subject the world is divided into two parts: "I believe" and "I cannot believe." Perhaps if we examine our own state of mind, we will find it difficult to determine with certainty the difference between optimism and force. I really think it is so in my case.

The phrase "Persistence of Force", what he said was the only thing in existence, did not suit Spencer. He con-

sulted Darwin and said he would be obliged to content himself with it—Darwin having suggested the word “Persistence.”

I believe the word “Determinism” would have been gladly received by Spencer. This word has the quality of continuity, force, persistence, and is not anti-pathetic towards regression. Moreover pathetic, it consorts with a kinetic theory, and does not fix itself to a progression of anything. It is to be considered also as indicating the restless activity that we know pervades all nature.

Certain am I that this is the word that Spencer looked for. The term “Persistence of Force” is very indefinite, and is no guide to the feature of the action of force.

Professor Cook’s “*Evolution in Man*”—(I think that is the title), deals with kinetics wholly; and “Determinism” is wholly kinetic in its action—as shown by the illustration of the sudden breaking of a derrick rope, and the killing or severely injuring of a passerby. Good company, bad company—environment each is very kinetic to the young person—and often to their elders; and the influence is, for well or for ill, wholly unfelt by the recipient at the time; but appearing later, or, not appearing, remaining dormant. This is essentially “Determinism.” For the two principles, good and evil, are ever in close contact, always in motion—and there is no certainty as to the degree of result—the result is determined at the instant; the evil may be modified, or the good may be deteriorated. Therefore, “Determinism” is wholly in accord with a theory that there is a fixed principle of evil or a Law of Demolition.

If the term “Law of Demolition” is objected to, as being a too great shock to the idea of a good God, so benign, it may be that the term “Law of Distribution” will be more favorably received—and this term is directly in harmony with “Determinism,” a word that comports easily with the muddle of Life—indeed no other word will so well comport—no other word comports at all. It is elastic; and yet very definite as an explanatory word.

It is the only word that will explain the sudden changes in human affairs, individual and communal, and at once

justifies a declaration that there was no Free Will in the matter. Here may be remembered the kinetic chain of distresses that befell the traveler and others in one of Benjamin Franklin's lessons, beginning with the loss of a nail from the shoe of his horse. I do not remember how it was that he started without having the shoes of the horse examined, but some kinetic incident undoubtedly diverted the otherwise and ordinarily careful man.

We are all aware of the fortunate or unfortunate results, as they may from time to time be, of unexpected conjunctions—and this is plainly illumined by the word "Determinism." This word eliminates "Fatalism" and yet preserves all the features of Fatalism without any suggestion of pre-destination. A caterpillar is peacefully wending his slow way on a bright summer or autumn day; a wasp flying by, sees the insect, and, obeying the law of his being, stings the caterpillar to death. Here was a conjunction which determined the length of the life of the caterpillar, and the conjunction was wholly accidental; the ordinary course of those two lives brought it suddenly and unexpectedly about.

It may be interesting to note that the sting of a wasp will make the body of the caterpillar or of the daddy-long-legs, as fixed and rigid as though it were made of terra-cotta. I have seen this "benign" death several times, (see remark of Sir Frederick Treves of London on "benign" death) and the removal of human beings by the multitude of methods, "lest the earth become too densely populated" (see again remarks of Dr. Treves) precisely as heartless. Nature is improvident in production in each sphere of her work, and reckless in the method of removal of material and of agents.

It is force, force, force!

Oh, there is surely a fixed principle of destruction in Nature, and sickness is as much a part of the plan of Nature as is health—health long enough to insure reproduction; the issue to be liable at any time to an undermining, in the operation of the process of removal to make room for others. Thus all sickness is the work of the Great Cause, just as much as is health. No matter what the sickness, it is here, and

never probably will be eradicated—and it is the work of the Creator..

Everything that happens is the result of law, and man is the victim; and the victim is deemed by his more fortunate fellow-man to have been an agent, and to have had free-will. No! there is practically no free-will. Nor would Dr. Treves enjoy life, or have been knighted for his services to humanity as a physician, or been well-to-do financially, as we must assume he is, had a "benign" sickness incapacitated him and held him in misery—he and hundreds of thousands of others abject and distressed, to be early deprived of life, in the interest of hundreds of other thousands, who would thus have less competition in the struggle for existence? He bears the distresses of others bravely. But I am not captious. I am simply finding support for my views, and I believe I can always find it in the language and attitude of my opponents.

The Law is easily seen and understood, as a purposed process, by taking a few of the simples that science is settled upon. This for the operation of the law.

For the moral quality of the law, why should man excuse in the Great Cause that which he would not excuse in himself nor in his neighbor—the higher man.

I think this philosophy is simple and straightforward, and ample.

Looking over my clippings today, by doing which I from time to time refresh or otherwise comfort "an afflicted spirit," I renewed my reading of the following: (it appeared in July, 1904).

TO THE EDITOR OF THE SUN—Sir: All of the correspondents who make the second half of your editorial page almost as interesting and instructive as the first half of it, and who have been recently wrestling so learnedly with "The Riddle of the Universe," the origin of good and evil, seem to me to make the common error of regarding the whole matter from the anthropocentric point of view. If one assumes in advance that the universe or the earth was created, or came into being, or developed to present conditions, with

special reference to the welfare of man, or of any other particular animal or vegetable, or all of them together, he must necessarily admit that the means were very clumsily adapted to the end.

Iliya Metchnikoff, the distinguished successor of Pasteur, in his recent remarkable work, "The Nature of Man," has clearly enough demonstrated, if universal experience had not done so before, that the whole expanse of nature is one vast battlefield, upon which every organism that comes into being is at once confronted by enemies on all sides, and even within itself, to whose attacks it sooner or later succumbs. What to superficial observation seems so nicely adjusted a balance in the order of nature reveals itself to the more careful investigations of science as the veriest jumble of disharmonies and antagonisms, in which no form of individual or special life can maintain itself for more than the brief period during which environment temporarily and partially favors it.

From one hundred to one hundred and fifty millions of species of animals have come into being on this little earth which are now found only in a fossil condition. What would these say of the beneficence of nature, could they speak to us from their multitudinous graves? Of the present two or three million species of animals man is the latest arrival, with the exception of the parasites who prey upon him, and has with the exception of these parasites, the least ground for claiming that "the sorry scheme of things entire" was arranged for his special benefit, or indeed with any reference whatever to his welfare. The cockroach and certain scorpions, which have survived from the carboniferous period, could claim a special providence on their behalf with much greater justice, for nature has been adjusted to their conditions of life for a much longer period than to man's and it will probably continue to favor their existence long after man shall disappear from the glimpses of the moon. Hamlet calls man the "paragon of animals;" but Hamlet had never read Metchnikoff, or he would have known that his "paragon of animals" is scarcely conceived before every cell of him begins to conspire against his life, and every organ of his

body as it develops in form develops diseases to kill him.

Suffice to say that there is no form of life in nature which is not a mere accident of temporary circumstances, and not so ill adjusted to its environment that it is plainly destined to early extinction, both as an individual and a species. The Slocum disaster, which started the controversy in your columns, was but one of the infinite number of disharmonies in nature which are visible or invisible all about us, and to attempt to explain them on any theory of universal design is as idle as to explain the fact that the lower intestine in man develops daily 128,000,000,000 of bacteria, which war upon his life. Haeckel dreams of a time when man will give up religion as an explanation of things and find happiness in ordering his life by an understanding of nature's laws. Metchnikoff hopes that science will in time discover and remove the "disharmonies" in man's organism and environment, and enable him to live healthfully to an extreme old age, finally expiring in painless euthanasia. The first forgets that man is a religious animal, that religion is a part of his necessary environment, not because it is true but because it is useful. If you please, it is one of the delusions upon which he lives, and by means of which he is enabled to become a social animal. The second forgets that, if all disharmonies were removed, man would live so long and become so numerous that he would crowd himself to death. Disharmonies, by killing off every generation quickly, make room for the next.

There is a small lake in one of the Northwestern Canadian provinces in which the whitefish has found almost precisely the conditions for which Metchnikoff hopes. There are no coarse fish in the lake to devour the spawn or young of the white fish, and the water supplies abundant food for the latter. No disharmonies are there. As a result, the white fish multiply so rapidly and live so long that every ten or twelve years they crowd one another to such a degree as to develop a disease which kills them off all at once, leaving nothing but spawn in the lake, which hatches out and produces the same conditions over again. This is precisely

what would happen to man if science could remove all disharmonies from his life; if there were no diseases, no hunger, no wars, no Slocum disasters, no deaths except by euthanasia, the race would grow so numerous that we should finally all rot to death together, and there would not even be spawn left from which a new generation might be bred.

Bad as it is, therefore, "the scheme of things entire" can neither be improved nor clearly explained by science, religion or anything else. It is clear, however, that it is the miseries, the enormous preponderance of premature deaths by disease or accident, the pestilences, famines, wars, calamities, and not the happinesses of human life, that make the continued life of the species on earth possible. Nature aborts all her works to make room for more. She never finishes anything or permits any thing to become perfect. Don't call this pessimism. There is, as I have endeavored to show, a genuine optimism in it.

M. J. DEE.

If this letter of Mr. Dee does not justify some individual pessimism, then I am at a loss to understand how the word has a place in the English language.

Three principal traits are to be observed in personal make-up; Optimism, Pessimism, and Calm, which may be resignation. These are mainly temperamental—always so in youth; and I look upon their existence in individuals as wholly involuntary. There is scarcely any Free-Will.

Mr. Dee states that effort at self-preservation of the race (and of the individual likewise) is Nugatory. Here is presented Professor Cook's kineticism, as I understand his paper (*Kinetic Evolution*). But if Professor Cook saw only progression and took no note of regression, he saw only one-half of the scheme.

When either Optimism or Pessimism prevails over Calm, a disharmony takes place; and the Calm must be so pervasive that it withstands all the shocks that the fallible discernment brings upon it.

I am sure that Optimism is to be classed with the art preservative of Nature—a form or phase of Force. Pessimism is the opposite quality—an absence or decay of force.

Calm is likewise a force when a trait of organic mental makeup, a quality—a resisting force, passive. Each is expressive of a state of mind. Optimism may well exist in a sickly body, Pessimism may equally well exist in a sound and active body. In this case Pessimism is a result or a remainder—the large quantity of Optimism has utterly vanished.

Pessimism gives a comfort when one is convinced that he has done his best, done the inevitable, the unavoidable; and has seen that the sound judgment and safe line upon which he had stood fully forearmed was slowly and in obedience to the law of disharmonies, taken from under him—in other words, the Law of Demolition was at work.

But when he remembers his Christian education, or instruction—the better word—that rose from all the pulpits and the religious literature of the Western Civilization—"God will protect;" and realizes that it is destruction and not protection that Nature deals out for that which she has created, he becomes bitter at heart; and many cast themselves away, feeling that it is useless longer to contend.

I cannot see Mr. Dee's "Genuine Optimism." Surely the small lake of white fish cited by him shows that Nature (or Mr. Dee's interpretation thereof) intends forever to destroy.

Verily his letter justifies the screed "Away with pessimism." That this is "the worst of all conceivable worlds" as Voltaire replied to those who asserted the precisely opposite, is, to my feeble intellect, most directly shown by Mr. Dee. I see not the slightest warrant for his "Genuine Optimism."

He seems to be afraid to state to the world his opinion of the desperate state of mankind—that mankind must forever suffer or not suffering, become extinct, as the white fish, under perfect conditions dies—that is to say, stating that perfection produces extinction, he fears to be considered a pessimist.

I cannot understand how he finds a "Genuine Optimism" the e.

To the contemplative scientist, the evolutionary atom of matter, called man, pessimism is respectively presented; and him, sane, ratiocination cannot dispirit.

In our judgments, however, there must not be forgotten the subjectivity of received impressions and memories pre-existent and subjectively held, to reappear in the original and correctly perceived form, upon the incitement of a given cognate later encountered—a cognate not equal to the original perhaps.

By the law of demolition, in operation, Nature has her biolytic agents in every realm—Giants and Germs, and no one can escape, however valiant, or evasive, or beautiful, or charming. I have almost reached complete apathy as to all that concerns life. Humbug! Evidently there is design, but “with intent to deceive,” as the lawyers would say. My spirit is worn out. The sentence of decay is upon everything. From Chicago devilled hams to Cerulean Heaven, there is naught but deception. Bah! Faith is needed for both, and for each—and without it, the end of man, of every man, would be suicide.

Perhaps I am alone in the house; everybody out. At times my heart grows weak with a sense of utter loneliness. I have no permission to read—impossible. I can only wander up and down and around, and think of the past three score years, their visions and their vanities. All gone! And with them, those connected. At my age but few remain, and not one may be an acquaintance; and at best, each is in the same state of isolation. Here is where Religion is useful. But I have seen and known those who went regularly to church—I speak of men—and to confession, I suppose,—they went to seven o'clock mass; and during the week following, vulgarity and profanity was their occasional misfortune of speech. I cannot understand that; such perfunctory religious observance as they exhibited certainly had a good effect upon them and upon their children and family generally: Yes, religion is a necessity, the scientist to the contrary notwithstanding. Unfortunately I have it not, never had it in the sense of other than as passivity, which the knocks of the world and the nature of things in me, and without me, destroyed. We are all involuntary. I will not enlarge upon the theme. I could only repeat *ad nauseam*.

I see the young growing up, to go through all the trials, troubles, temptations, errors of judgment—for the law of Determinism will not change; the law of Demolition will never rest. How thoughtless people are! Yesterday I had ham and eggs. Today I had peas and lamb. Why did I not eat the eggs without the ham? Why did I not eat the peas without the lamb? Had I been consulted those two poor creatures would be alive today. Had I my way they would have died of old age, passed away in sleep. But the better man than I am, "Gave thanks" for the abundance on his table, never thinking of the agonies of those two creatures in the course of their dying, that he might live. This is life illustrated. We think only of ourselves. The Lord is said to love the lamb and to temper the wind to the shorn one; but the wolf knows that the Lord is good to him in putting the lamb in his path that he might lick his chops free of the warm blood and go away no longer hungry, but ready to lie down and sleep.

Optimism does the work of the world. Pessimism is as the night that surely follows day. But Optimism is at war with Optimism—necessarily. Optimism is the localized energy of Nature. Here and there may be seen a calm soul high above the toiling tides of life, as the mountain's placid lake is above the community of the ocean. Nature furnishes examples of everything—that which should be, and that which should not be. Here is a chance for the Apologist to say: "Ha! Ha! Scoffer, I have thee upon the hip. I will throw you now: why not avail yourself of the warning of the Example?"

Ah! My rapid friend; Hold! Have you not been taught that we should not do evil that good may come of it? Is it any more than the cries and writhings of the lamb under the fangs of the wolf, a lesson to other lambs not to stray from the fold, not to go so near to the door of their little pen world? Remember, Mr. Apologist, that to excuse is to accuse.

A very devout friend of mine had no sympathy for the people of St. Pierre, because they had had "plenty of warning" from the rumbling mountain—and were a bad lot any way.

I wonder was this the old Hebrew "vengeance is mine and I will repay, saith the Lord," that was uttered before the days of Christ. Yet this man was a Christian. I am not finding fault, I am only showing that which seems to me to be thoughtlessness. I suppose having found myself thoughtless, I had come to be altogether too thoughtful. For not one jot or tittle of the law of life can be changed by thought.

It is now, say, three o'clock of my life's time, and I must wait six hours more before any one appears. Nor would I go out. I am done with the world. The "beer and skittles" frivolities may go hang—they cannot drag me away from the past, nor can they blind me to the future of life on earth for the one or two in whom I am still interested. Better had they not been born—I am persuaded.

You, gentle reader, have some kind of trouble—so has everybody. Don't let this drizzle dampen your ordinarily smoking optimistic glow. Do not think I am trying to get "even" with anything. I have enough charity or Christian virtue to cover that particular sin. I am weary of living.

I do not write to convey doleful words and thoughts, yet such has been my state during the last years—the uselessness of further contending against the ebb tide of all human existence; and the recollections of the events of years gone by. My purpose is to remove a possible interpretation, that did not occur to me until just now.

The term, *ad nauseam*, in a preceding paragraph, only indicates the probability (or fact) that some one must have become weary of and ill-disposed toward my iterations and reiterations on the subject, the Principle in Nature, fixed, that I have called The Law of Demolition. Please accept this truthful explanation of the employment of a term inapt, perhaps, and inept. I really believe that fatigue of the mind's eye of faith, such as agnostic cataract imposes, interferes with the proper appropriation of words. For having written thus far on life's human page, I am unable to read a word of it. I am indeed sad.

All and all at times it seems as though I could scarcely draw another breath. Heroic, so to speak, resolution to

shake off the depression, alone aids me—though of course, I am not going to die or kill myself, by reason of the particular depression; it is not fatal in tendency, this quality of unfaith, as I understand it.

“Into each life some rain must fall.”

(*A Rainy Day*—Longfellow.)

PARESIS, EPILEPSY AND EPILEPTOID AS MENACES TO RAILWAY SAFETY.

By C. H. HUGHES, M. D.,

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ber of Home and Foreign Medico-Psychological
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ST. LOUIS.

DR. PHILLIP COOMBS KNAPP contributed a timely warning paper on the subject of general paralysis in relation to railway service to the *Boston Medical and Surgical Journal*, February 6th, and what he says of the perils of public safety because of this brain disease in its insidious incipency, is true of the danger from other cerebral affections, notably epilepsy, its alternative epileptoid morbid automatisms and profound cerebrasthenia, the psychasthenia of long overtime brain strain and too prolonged vigilance for instance.

Dr. Knapp gives a record of fifty male adults examined in the out patient department of the Boston City Hospital. Five of these fifty men were in the employ of public transportation companies: one as a railway clerk, one as a station-agent, one as a locomotive engineer, one as a motorman and one as a conductor. Four others had to do with traffic in the streets as teamsters or coachmen. One was a boatswain in the merchant marine service. Two others were stationary engineers.

In the various hospitals for the insane in Massachusetts he learned that out of about 263 general paralytics in the institutions in April, 1907, there were nine railway employees. The essential point is that there are a number of persons in the early stages of general paralysis who are still in the active service in more or less responsible positions on our steam roads and trolley lines. There are also persons in the early stages of other chronic disease of the brain attended with

mental impairment who are also in active service in similar positions. Patients with disseminated sclerosis, cerebral arteriosclerosis, and brain tumor were also holding places. He then says every neurologist has probably had a similar experience. Dr. Knapp then quotes with comments as follows:

Accident Bulletin No. 20 of the Interstate Commerce Commission, I find, among others, the following notes as to the causes of accidents: "Too high speed in fog. Engineman did not see flagman. Engineman, who was killed, had been on duty seventeen hours and thirty minutes." "Operator omitted two words in writing a meeting order." "Pilot misinterpreted dispatcher's order." "Operator failed to deliver order." "Engineman, 27 years' experience, ran past automatic signal indicating stop." "Engineman ran past automatic signal indicating stop." "Conductor, engineman and whole crew (on duty sixteen hours) overlooked meeting orders." "Engineman disobeyed rule to stop at head of grade."

The Baker Bridge accident on the Boston & Maine road, on the 26th of November, 1905, in which seventeen persons were killed and about fifty were injured, was due to similar negligence. An express train ran into an accommodation train on a clear night and on a straight track. The engineer "felt competent to take the train, and was in good condition, *notwithstanding a headache of which he spoke to nobody.*" He saw two green lights and two red fuses and "knew the meaning of these lights and the rules governing them; . . . but disregarding the rules that required him to reduce speed so as to proceed cautiously and so that he could stop within seeing distance, rules with which he was familiar, he proceeded on his way at high speed until collision was unavoidable."

Thirty-seventh Annual Report of the Board of Railroad Commissioners of Massachusetts.

Such reports indicate that in some cases there is a temporary failure of the brain to work with its normal accuracy. For some reason the man, although he knows the meaning

of the signal, and has the visual power to see it and knows what he ought to do in response to that signal, fails to act. In some cases this failure is due to the fact that the man has been obliged to work an excessive number of hours on a stretch as some of the quotations given above show. It is well known that indulgence in alcohol will cause such a failure, and therefore most railroads demand that their employees shall abstain totally while on duty if not altogether. We also know that, in the early stages of general paralysis and certain other chronic diseases of the brain, perception and memory are impaired, comprehension becomes more difficult, judgment is enfeebled and action is less prompt. A railway employee with one of these diseases may therefore fail to understand his orders quickly and correctly and act intelligently according to his directions.

It ought to be read by all railway managements and all of the people who travel or who have regard for their fellow man. It shows the need of neurologists and alienists as well as surgeons and ophthalmologists in railway medical service. Right and frequent neurological and psychological medical examination would prove economical to railway management as well as humane. Neurologists paid enough to be thorough in their examinations would enhance dividends through accident and damage suit salvage to say nothing of human misery averted or lives saved.

"ACCIDENT BULLETIN (No. 20) of the Interstate Commerce Commission tells us also that 4,225 persons were killed and 66,709 persons were injured in railway accidents during the year ending June 30, 1906. This applies only to actual passengers and employees on duty, and excludes the very considerable number of persons killed at grade crossings, at stations, etc. The *World Almanac* for 1907 states that the total number killed was 9,703 and the total injured 86,008, for the year ending June 30, 1905. We must consider also the killed and injured in street railway accidents, concerning whom no general data are available, although the number is certainly considerable. It is perhaps safe to say that 10,000 persons were killed and 100,000 injured by accidents

on steam railroads and trolley lines during the year ending June 30, 1906, in the United States. It is furthermore an alarming fact that this mortality is increasing in comparison to the number of persons carried. The *World Almanac* for 1907 shows that, whereas in 1897 one passenger was injured out of 175,118 carried, in 1905 one passenger was injured out of 70,654 carried, and in 1897 one passenger was killed out of 2,204,708 carried, while in 1905 one passenger was killed out of 1,375,856 carried. The total loss in killed and wounded in the Northern army during our Civil War was 67,058 killed and 318,187 wounded,—an annual average of 16,765 killed and 79,547 wounded. ”

Similar considerations to epilepsy and epileptoid states and the automatic psychic alternatives of the epileptic state of brain, especially to the slighter epileptoid conditions, which are no less grave in brain disease origin and consequence than major epilepsy or gravior epilepsia is so apparent that all may see and guard against employing its victims. Epileptoid in many of its phases is only considered by the laity as “slight fainting spells” or less serious states though the unconsciousness is from the same source. Physicians often do not recognize these minor phases of the epileptic state of brain and mind as of the significance due them from a pathological standpoint.

Especially are the alternative and double consciousness paroxysm sequel states of epilepsy not always considered, the Jekyll and Hydes, the epileptic night perambulators, those who wander in a changed personality and lead a dual or alternate conscious life sometimes vicious and sometimes highly exemplary—for periods after a prolonged epileptic seizure or succession of seizures. Epilepsy not only suspends consciousness for a time, it sometimes obliterates consciousness of the previous life, as well as causing the familiar epileptic oblivion to recent acts. Epilepsy in its grave apparent paroxysmal or in its procursive forms is not so serious in possible and consequent sequence to the railway and other life bearing service as the lightly appearing insidious epileptoid and the nocturnal varieties where the marked visible

evidences of this serious brain enthralling malady pass off unknown. Yet the search for epilepsy and epileptoid in those who hold or seek responsible railway service should be as vigilant and rigid as for color blindness. An epileptoid may be sound in his sight and able to distinguish all the colors of the prism when in normal mental state, yet be so blind at times in the sight areas of the brain, as to be oblivious to all colors and objects and yet able to walk about or to handle a switch or throttle in a transient automatism of epilepsy or epileptoid.

One of my patients who had never displayed major epilepsy entered, signed on the stub of his check book, the name and amount and though he remembered no more went on filling in the check till he had signed it and was surprised a little while after awakening from his epileptoid obliviousness to see all that he had done. He only remembered filling out the stub. Another, a doctor, got out of bed at night, dressed, hitched his horse and went out to make a visit, when he came to himself, returned put up his horse, disrobed and went to bed. Many similar instances and others, like those epileptoid actions detailed by Hughlings Jackson, Kussmane and other remoter and later writers have come under observation, showing that correct appearance in epileptoids and epileptics may be the product of a morbid as well as normal state of brain. They suggest the importance of a search for the state of brain from which their morbid acts proceed and demonstrate the importance of neuropsychological examinations in responsible lines of brain service where dependent lives are at stake.

PSYCHOLOGICAL STUDIES OF MAN'S MORAL EVOLUTION.*

BY ALBERT S. ASHMEAD, M. D.

NEW YORK CITY.

ONE who signs himself "J. M." has said:
"Thus not only is history a melancholy record of futile struggle, when looked at from the standpoint that all must end in meaningless oblivion, but it is an appalling spectacle to all who would find in life evidence of those attributes of supreme power and supreme beneficence which men are wont to ascribe to an author of the world.

"No one can dispute the logic of John Stuart Mill's assertion that the author of the Sermon on the Mount was more benignant than the author of nature.

"But while it is true that the existence of suffering in life on grounds of reason, is irreconcilable with conceptions of a supremely powerful and supremely beneficent Creator, and while it is further true that the employment of evil agencies such as wars and struggles to evolve more desirable conditions is inconsistent with ideas of a supremely powerful and supremely beneficent Creator; yet good outweighs evil in life and happiness predominates over wretchedness.

"On a preponderance of evidence, therefore, while the part strife, poverty and wretchedness play in effecting desirable conditions must forever baffle attempts to justify completely conceptions of a supremely powerful and beneficent author, yet as history is a record of the gradual betterment of human conditions through incessant struggles and turmoils, natural evidences justify faith in a power that "makes for righteousness."

*Conclusion.

"A recognition of the impenetrableness of the mystery concerning the origin of things is one to which the old quest of truth inevitably leads. With growing appreciation of how natural evidences only intensify the unalterable darkness in which all is shrouded, and of the futility of all efforts thus far to dispel the mystery, what men believe is gradually coming to be less and less regarded.

"The most unwavering devotion to truth can never require denial of that which does not lie within the province of any to know of.

"There is no justification for assuming that because history apparently fails to indicate an omnipotent and beneficent Creator, therefore such an hypothesis is untenable; over and over again it must be emphasized that the unknown cannot be sounded by nor interpreted in terms of the known.

"It is wrong even to assert that the mystery concerning the origin of things is unknowable because it involves more knowledge than we have."

To which Goldwin Smith replies: The Darwinian hypothesis I reverently accept at the hands of its illustrious author, and the other chiefs of science, so far as the special phenomena which it embraces are concerned; though all grand discoveries are apt to hurry us too far and one cannot help remarking that during the long tract of time during which the course of animal life has been witnessed by man no instance apparently of evolution proper, or of visible tendency to it, has been observed, all the changes in animals that have taken place having been brought about in other ways. I only plead for consideration, not of the physical evolution alone, but of all the phenomena of humanity.

"I do not maintain but on the contrary have disclaimed any denial of the continuity of human development or assertion of a miraculous genesis of conscience. The matrix of conscience may have been the sense of social utility and the necessity of conformity to social law. Yet the ultimate outcome may be something more spiritual and looking up to a higher tribunal. Miracles we know there are none, but of

marvels surely none can be greater than the evolution of even the lower organs and functions of human life out of the germ.

"J. M.'s" tone is pessimistic, as at times perhaps is the tone of us all. In his estimate of human history he seems to leave progress out of sight. Progress essentially distinguishes man from other animals and his history from theirs. It continues, though slowly and fitfully, in spite of all impediments and relapses. Apparently it points to some consummation in which conceivably all who have furthered its coming may have an interest. Life is a mystery. The universe is a mystery. The existence of evil is the darkest of mysteries. Yet not otherwise than through the struggle with evil, so far as we can see, could be formed the excellence of character which is our highest conception of good. The mystery of physical evil, in one of its phases at least, Christianity frankly faces when it admits that those on whom the tower of Siloam falls are not the greatest of sinners. It is strikingly contrasted on this point with the impotent conclusion of the Book of Job.

"I cannot say too often that I presume not to advance any theory. I only plead, as I have said, for recognition of all the phenomena, moral as well as material, and for perfect freedom of inquiry, unfettered by clerical tests, as the sole guarantee for truth. The case is pressing. That the religious foundations of society are shaken is shown in many ways: by the falling off of attendance at churches, by the increased intensity of the struggle for this world's goods, and even by the proneness to embrace such beliefs as spiritualism by way of substitutes for religious faith. We cannot afford to keep learning and conscience mute."

Another writer on Social Evolution, *Man's Moral Nature and Material Progress*, has said:

"It will doubtless be granted that the physical conformation of man is the result of his material environment. He stood up on his hind feet, and his front feet became changed into hands because he had to get himself a living, and he could get a better living as a biped than as a quadruped.

Though there are no men now living at that low stage when the observer would be in grave doubt as to whether they are men or an improved kind of gorilla, yet nobody will now doubt that at one time there were such ancestors. They had no fire, no speech, no tools deliberately fashioned and formed. They had no society, much less a family. Among such beings where was "the moral nature" or the power of forming ideals?

"When, however, in order to get a better living the horde was formed, living together in promiscuity, something like a moral nature began to form, the virtue of courage for the benefit of others; something like a mind began to form from the necessity of communication by manual and vocal gesture. Inventions were painfully and slowly made, of the way to kindle fire and the way to chip a flint so as to make a tool, all the way along, step by step to what are recognized to be mechanical inventions, while growing out of these mechanical inventions were social inventions serving the same purpose, to make a better living. If from the sound "pt" representing the noise of some swiftly flying creature we get the word "petition," as Prof. Greenough has proved, it is not impossible to see that the mind of man developed in much the same way as his body, from very inconsiderable beginnings, each advance being not merely an addition to its predecessors but a multiplier of them. Within the last century we have seen a gesture language grow from rudimentary signs expressing nothing but the simplest concrete notions to signs expressing the most abstract and religious concepts. I mean the sign language of the non-hearing, which is not English or anything like English. What power of idealization could the congenitally deaf have had before the Abbe de L'Epee?

"Is there a moral precept which is not a social precept? What is "my duty" if it is not "my duty toward my neighbor?" The one "toward God" is entirely the obligation to respect as authoritative the command to fulfill "my duty toward my neighbor." The human race was well along toward emerging from the status of barbarism when it invented gods who

gave sanction to socially beneficial conduct and disapproval of that which is "wicked" which is the same thing as "wasteful." The battle ground of to-day is this: We have attained a plane of civilization in advance of our institutions. Conscience, which is the social sense, is struggling with selfishness, which is the individual sense. We know that the society is more than the individual, and we know which sense will get the ultimate victory. It is precisely the same problem which has come up so many times in the past, and has always been solved in the same way. The society that did not yield to the social sense perished. Our savage ancestor did not want to give up certain conjugal rights any more than the multi-millionaire wants to give up his riches, but he had to, or the evil of inbreeding would have destroyed the race.

"It seems to me quite apparent that "the moral nature" and the power to form ideals are the results of social environment, just as the physical conformation of man is the result of the world about him. The struggle for existence in one case, as in the other, is a sufficient explanation of both problems. Of both? They are the same."

Goldwin Smith, I may say, occupies as Moderator, a position far more useful than if he were an adherent of System A or of System B. He calls the attention of the disputant from time to time to features that seem to have been by them unnoticed.

All contributors to the subject are entitled to the thanks of the reading public—they do their best towards illumination, and toward classification. The writer on Social Evolution whom I quote seems to be something of a Pangloss, looking upon the bright obverse, and ignoring the reverse dark as "old night." He is quite content that good predominates. He takes no thought that when and where good does not predominate it is for the reason that evil is for the time being predominant. He, being a Christian, forgets that Christ, the to him, Son of God, taught "Never do evil that good may come of it." Plain as day it is to one who can divest himself of prepossessions, that "Good" is the Art Preservative and "Evil" the Art Destructive of Nature. Every

good, whether material or moral, has its enemy; its attendant destroyer on deadly mission bent. Religion is the only ointment that can smooth and soften this undeniable and ugly, wicked fact.

Man's starting point on his journey seems fairly well determined. As to his destination, he can only look wistfully to the right, to the left, and engrave upon his heart: "Hope on, hope ever." So long as man remains carnivorous, he need not hope to be celestial, unless he can see a lessening of the carnivorous quality in him, unless he can see a lessening of war. We find that he eats as much flesh as ever, that he kills everything alive including his brother man; he is the greatest shedder of blood in existence. He remains the animal that he has always been as man. His body and his spirit are as much a part of the earth as is its atmosphere and must with the earth remain. His body has reached its highest possible form, presumably his mind is expanding.

Biologically, astronomically man is a creature of chance, no more responsible for his thoughts and beliefs than is the wind for its direction and results. Why should he be judged by a Creator for the generations of antecedent cells, the potent factors in the operation of those possessed today?

An Eternal God must judge all the generations of organic life from first to last; on this planet, as only one being—if there is judgment at all.

EFFECT OF TETRA-HYDRO-BETA-NAPHTHYLAMIN ON THE TEMPERATURE, WHEN THE BLOOD SUPPLY BY THE CAROTIDS IS BLOCKED BY PARAFFINE.

BY ISAAC OTT, A. M., M. D.
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IN these experiments warm paraffine was injected into the peripheral end of each carotid. The jugular was prepared for the injection of the naphthylamin. The animal was bound down in a warm room and his body enveloped in towels to prevent loss of heat. The temperatures taken were rectal. Sixteen experiments were made. When the paraffine did not sufficiently interfere with the blood supply the temperature rose as in the normal animal. In experiment 1 there is a rise of 7.8 degrees F.

If the circulation was blocked too effectually, artificial respiration had to be resorted to in some cases. In Experiment 2 the temperature fell 1.3 degrees F.

When the respiration centre was not affected, then the naphthylamin did not particularly affect the temperature, as is shown in Experiments 3, 4, 5 and 6.

If the naphthylamin compound elevated the temperature by changes in either the respiration or circulation, then it should do so in the experiments here detailed. If, however, it raises the temperature by an action on the thermogenic centres in the corpus striatum and the tuber cinereum, then no rise of temperature of any consequence should ensue, because the arrest of circulation in the carotids prevents the

drug from acting on these centres. We have shown that the drug does not influence the circulation by any action conveyed by the way of the corpus striatum or the tuber cinereum to the vaso-motor centres or the origins of the cardiac nerves. The action of naphthylamin on the circulation is directly on the heart itself. On the respiration we have shown that naphthylamin whilst elevating the temperature, diminished the supply of oxygen. All these facts corroborate the view that thermogenic centres exist in the parts of the brain supplied by the carotid circulation.

EXPERIMENT 1.—Cat. Carotids prepared; central ends having cannulae inserted, peripheral ends ligated.

TIME. TEMPERATURE.

P. M.

2:50	101.8 1 cc. paraffine in each carotid.
3:00	101.9 .01 gram naphthylamin per jugular.
3:10	102.4
3:20	102.8 struggling.
3:30	105.0 struggling.
3:50	106.1 struggling.
4:50	109.6 struggling.

Plus 7.8 degrees F.

EXPERIMENT 2.—Cat. Carotids prepared; cannulae in central end of carotid; artificial respiration during whole experiment.

TIME. TEMPERATURE.

P. M.

3:10	100.3 injec. of 5 cc. paraffine per jugular.
3:20	100.3 .01 gram naphthylamin per jugular.
3:30	100.3
3:40	100.4
3:50	100.2
5.00	99.0

Minus 1.3 degrees F.

EXPERIMENT 3.—Cat. Carotids prepared; cannulae in central end of carotids; jugular prepared.

TIME. TEMPERATURE.

P. M.

2:50	101.2 1 cc. of paraffine in each carotid.
3:00	101.2 .01 gram naphthylamin.
3:10	101.2
3:20	101.3
3:30	101.4
3:40	101.4
3:50	101.4
4:00	101.4 plus 2 degrees F.
4:50	101.0

EXPERIMENT 4.—Cat. Carotids prepared; cannulae in their central end; jugular prepared.

TIME. TEMPERATURE.

P. M.

2:50	100. .9 cc. of paraffine in each carotid.
3:00	100. .01 gram naphthylamin.
3:10	99.8
3:20	99.6
3:50	100.2
4:00	100.3 struggling.
4:10	100.4
4:20	100.5
4:30	100.5 plus 5 degrees F.
4:50	100.3

EXPERIMENT 5.—Cat. Carotid and jugular prepared.

TIME. TEMPERATURE.

P. M.

3:00	100.6 1 cc. paraffine in each carotid.
3:10	100.6 .01 gram naphthylamin.
3:20	100.6
3:30	101.0 struggling.
3:40	101.2 struggling
3:50	101.2 struggling.
4:00	101.4 struggling.
4:10	101.4 struggling.
4:20	101.4 struggling.

Plus .8 degrees F.

EXPERIMENT 6.—Cat. Carotids and jugular prepared.

TIME. TEMPERATURE.

P. M.

2:50 101.2 1 cc. of paraffine in each carotid.

3:00 101.2 .01 gram naphthylamin.

3:10 101.2

3:20 101.3

3:30 101.4

3:40 101.4

3:50 101.4

4:00 101.4 plus 2 degrees F.

4:50 101.0

APOMORPHINE AS A HYPNOTIC.

By CHARLES J. DOUGLAS, M. D.,

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APOMORPHINE is one of the most prompt and sure and harmless hypnotics known to medicine. In nine cases out of ten it will shut off the "stream of consciousness" with valve-like precision, if the dose is properly adjusted. This can be accomplished without vomiting or nausea. My plan is to administer hypodermically a dose small enough to just avoid the emetic action. This dose is usually about one-thirtieth of a grain (gr. 1-30) although patients vary in their susceptibility to the emetic action of apomorphine. The dose should be adjusted so as to be large enough to produce sleep and small enough to avoid nausea. If the dose is a little too large it produces emesis, and if it is a little too small it is inert. In some conditions, such as alcoholic insomnia or delirium, the emptying of the stomach is often beneficial, and consequently vomiting need not be guarded against.

In the *New York Medical Journal* of Oct. 28, 1899, I first published my discovery that apomorphine is a hypnotic. Previous to that date there was no mention in medical literature, so far as I know, of this important action of apomorphine. I sent a reprint of this paper to a number of prominent physicians, and received over fifty replies, every one declaring that he had never before heard that there were hypnotic properties in this drug. Potter's "Hand Book of Materia Medica, Pharmacy and Therapeutics" (edition of 1899) contains on page 394 this sentence:—"Apomorphine, though a derivative of morphine, is neither hypnotic nor narcotic in any degree." Since the publication of my papers on the subject,

this and other standard text books have pointed out the hypnotic action of this remedy.

I have recently found that Apomorphine may be combined with other hypnotic remedies with excellent results, the two drugs being combined in the same hypodermic syringe. Among the most successful of these combinations consists of hyoscine, gr. 1-100 and apomorphine, gr. 1-30. In some cases of delirium I have found this prescription especially serviceable. The action of each of these drugs is entirely unlike that of the other, and each supplements the other. Morphine may also be combined with apomorphine when it is indicated. It is often desirable to administer some slow acting hypnotic by mouth previous to administering apomorphine hypodermically. The action of the latter remedy is prompt and sure, but of short duration, while the supplemental remedy will carry the hypnotic action on after the apomorphine has ceased to act.

In the use of hypodermic medication the selection of good tablets is of great importance, and of all good qualities I consider solubility is one of first consequence. They should be so soluble that if one is placed in a syringe with ten or fifteen minims of water it can be readily reduced to a clear solution with a few shakes of the syringe. Yet there are tablets on the market which would not dissolve with half an hour of shaking. They have to be boiled or ground up before they will dissolve. Even if the patient does not die while waiting for the tablet to dissolve, yet the physician is subjected to a useless annoyance and waste of time.*

*While there are many manufacturers of good hypodermic tablets, it has been my custom to specify Parke, Davis & Co., as I have found their tablets uniformly satisfactory.

THAW AND HIS MENTAL STATUS.

By C. H. HUGHES, M. D.

ST. LOUIS.

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THE unstable psychic neurone and abnormal mental life gleams through all the career of Harry Kendall Thaw from childhood and through youth till now. At the present time under the lawfully imposed restraint over his erratic volitions, which he could not or would not exercise over himself without regulation imposed from without his own organism, he appears more rational than ever before. A jury has acquitted him as insane at the time of the murder of the ravisher of Evelyn Nesbit who later became his mistress and later still his wife, without such qualification as to present insanity as the testimony warranted and the presiding judge commits him to the New York Asylum for the Criminal Insane at Matteawan for further restraint and observation.

He is now facing the natural consequences of an unregulated life, but under more salutary restraining influences, than ever before in his life, such as might have helped him earlier in his career in the direction of normal self-control and inhibition of obtruding abnormal impulses, which ought to have been, but were not, repressed during his evolution from childhood to youth and manhood.

He is the victim, only partly voluntarily, of neglected repressive training, a bad heredity and bad habits of living.

By a remarkably constituted commission of inquiry as to his sanity, made up in part of non-medical men and not a commission of psychological experts, he has been pronounced sane and has been twice on trial for his life and the plea was insanity. If he was insane his insanity was and is of a kind that seldom if ever recovers but only may become abeyant and appear to the non-expert to disappear under such life impulse and passion regulation and interdiction from indulgence as an asylum for the insane or well conducted prison imposes.

With the beginning of his mental life appear the convulsivitics and later appears his melancholia (1903) as testified to by Dr. Bingman. His manner in the Tomb's cell, his delusion that the killing of White was an act of Providence, all show instability of neurotic endowment and presage with his other hereditary history, the break of brain that came to pass with so tragic a finality and, explain from a psychopathic standpoint his true mental status.

His broken hearted mother relates a story of family psychopathy, tainting the psychic centers of this unfortunate young man with inborn aptitude to go psychically awry, which she had failed to divert from wrong channels of pernicious indulgence in her spoiled offspring. This, with adverse environment and license of wrong propensities and passions, brought on a completer psychic perversion and destruction culminating in the tragedy for which he was twice tried, the jury disagreeing on the first and acquitting on the second, which ended on the first of February last.

Some future Darwin and Huxley and Spencer will some day write so plainly that all can read and unerringly understand the descent of psychopathy and its perils to brain stability, its perils to the stability of nations and the duties of its eradication from the race. This knowledge, that hereditary brain defect is imposed by unstable begetters of the unstably born modifiable by those to whom fall the duties of their guardianship and rearing, will then become general. Then it will be known that the highest and first personal duty is not to beget such defectives and the state will and should

prevent their breeding as menaces to social safety and normal civilization.

In the life record of this abnormal life, vagaries of conduct and passion, epochs of incoherence, impropriety and other violences than the murderous one for which he was on trial, were shown, as well as an attempt at suicide. His irrational conduct, great and erratic emotion and insomnia after his wife's recital of her antinaptial ravishment, were established in the evidence. His many insanoid states, and violent and destructive brain storms when under alcoholic influence often revealed his latent brain instability. He made the impression in his varying morbid mental states on different medical witnesses as paranoiacal, as stuporously melancholic, as manic depressively insane, as acutely maniacal and as a victim of folie circulaire. These different psycho-pathic appearances while they did not establish one special consistent and typical form of insanity did not show that medical experts were inaccurate in considering him insane. It is sometimes a psychological error to assume that one unvarying typical phase of mental aberration must cling through life to a person else he can not be insane. Stuporous states, depressive states, maniacal outbursts, fulminations, or brain storms, or suicidal melancholia, may be incidents of circular insanity and paranoia even. Mental states vary in forms of insanity and in states of sanity, differing from states of the latter in intensity and degree. Typical forms of insanity are more often seen within, than without asylums for the insane because within asylums for the insane the inhibitions of the patients are assisted by the attendants, the better environment and the withholding of those disturbing influences from the patient which, while he lived outside, operated to develop his insanity and provoke various outbursts and exacerbations, such as excessive alcoholic and venereal indulgences, unwise interference with the patient and other influences.

The solicitude that Thaw showed for the many young girls he believed Stanford White, spider like, was in the habit of betraying in his den, was apparently not altogether well founded, according to the testimony of Mr. Anthony

Comstock, who sought to verify Thaw's suspicions. At least Thaw's exaggerated belief on this matter may have been a delusion, considering the proven morbid state of his mind in other respects and there is a great likelihood of his mind becoming again delusively suspicious and distrustful of his wife. Morbid jealousy appears to have been a dominant mental state with him displayed in an alternating of intense affection and morbid jealous aversion. It was a fatal error in his wife to feed this pathological flame and keep it fanned by repeated reference to Stanford White. Her calling attention to him on the night of the tragedy was extremely unwise and cruel. But the ways of women are peculiar.

Readers of the *Alienist and Neurologist* are presumed to be familiar with the further facts in this case, so that we need not devote more space to testimony as rehearsed by the daily press during the two trials except to remark that the self-justified manner of the murder, the time and place of its perpetration and the murderer's conduct and speech immediately after, afford almost prima facie evidence of insanity. The murder was done openly in the presence of a crowd of witnesses, with no attempt or plan of concealment or escape where all who could see the play on the fateful night of June 25th, 1906, at Madison Square Garden, could see the murder and the murderer. He did the deed as though it was a righteous one, by an instrument of Providence, as, holding up the empty weapon he proclaimed to the astonished and frightened people that is was an act of Providence.

A delirium of interpretation (*delire de revendication*) lately so well discussed by Serieux and Capgras, physicians of the Asylums of the Seine, a condition characteristic of the constitutional psychopathies, appears in Thaw's own later version of the killing of Stanford White, as detailed by the reporter, Mr. Somerville;* this consciousness precluding epilepsy or epileptoid.

*"As I looked toward White that night, he was looking toward me. Never did I believe that such malevolence could be shown on a human face as was shown on his. His eyes were on fire with wicked hate of me. His mouth was open, showing all his big teeth in a horrible leer that was aimed at me. His very hair was bristling . . . and the thought came into my head that he was going to kill me. I knew that he had threatened to kill me, and I knew that he had hired thugs to beat and maim me. I don't remember walking toward him; I only remember that I stared at him and that I did not turn my back was because I thought if I did he would shoot me.

"I only remember that hideously, hatefully leering face, and after that standing in the garden with the crowd around me and becoming conscious that I had used my pistol."

The chronic delirium of a psychosis of degeneracy crops out in this and in other speech and conduct of this man. His emotions, memories and thoughts show perversion of perception, morbid magnifying of conduct of others and pathic errors of interpretation.

It is much to be regretted that the physical basis of mind disease was not more clearly shown as it might have been in this case. Clinical records of diseased physical states such as of the pulse tracing and dynamometer measurements, insomnia and the secretory functions. His clinical history was meagre at the trials. It may yet be made a part of the record to clarify the case.

A close study of the cenesthopathies and the emotional and mental reactions thereto of the neuropathic and psychopathic during a life that has culminated in insanity of either marked or non-demonstrative form, illumines these cases—the psychasthenic phobia states, the hypochondriacal and melancholic depressions and the varied aversions, antipathies, jealousies, etc., without normal cause.

Though Thaw was insane, the insanity testified to by the medical experts was accepted rather as an excuse for the jury's verdict of acquittal than as a basis of their medical conclusion and the case may be set down as another acquittal on the unwritten law idea that Stanford White deserved killing and that Thaw was his timely avenging Nemesis.

The strange inconsistent feature of this trial, however, needing some sort of remedy, is the fact that Thaw went into trial as a sane man, pronounced so at the conclusion of his previous trial by a law commission of inquiry, is acquitted on the ground of a past insanity of which this commission says he recovered and is yet incarcerated, though sane under New York law, in an insane asylum and an asylum for the criminal insane at that. One jury disagrees as to his sanity and irresponsibility, another says he was insane, murderously insane and acquits, another called a commission of inquiry which said he is now sane but the judge on the bench sends him to an asylum because the last jury did not consider the insanity of which the commission in lunacy said he had recovered. Here

is an anomalous dilemma which the court has met and for which the law of New York has partly provided. But he is to be placed under observation there only for a time to see if he still continues sane as the commission *de lunatico inquirendo* pronounced him at the first trial. Pronounced insane by a petit jury, he is yet *prima facie* sane, and has been previously so pronounced by a jury of inquiry as to his insanity and yet he is in a lunatic asylum under farther observation.

Thaw's ever dominant morbid egoism, his unstable and erratic life at school, so incorrigible that his own mother then thought him insane; his violating the proprieties in so many ways at home and abroad and requiring restraint especially while under the care of Dr. Sidney Russell Wells there in January, 1899; his rapid pulse, headache, incoherent speech, his 99 degrees of temperature, not the fever of ordinary delirium, his persistent foul, obscene language without provocation, his noisy violence and insomnia at night, diagnosticated by Dr. Wells as acute mania without trace of alcoholism, his leasing of the foreign castle and conduct in it towards his wife; the sanitarium and laudanum suicide attempt at Monte Carlo as testified to by Dr. Maurice Guaja, in corroboration of Evelyn's story. This with Dr. Frederick Burton Brown's testimony and that of the nurse, Lillian McBride, to his wild maniacal attack with no trace of alcoholic intoxication. The testimony of the experts, Evans, Mabon and Wagner, the opinion of Hamilton, Hammond, Macdonald and Jelliffe and of family physicians at Pittsburgh, his violent brain storms at home, his bizarre conduct as a student, his dementia praecox aspect at times, his psychic life altogether, marks him as something of an anomaly in alienism, if we judge him from psychiatric standards as we learn them within the walls of insane asylums. And yet he is and has been all his life insane, dominated by his insane temperament, more at some times than at others, and manifesting more marked mania.

Under judicious restraint such as he has had since his arrest and confinement and such as he will have at Matteawan, something akin to the restraint and guardianship he has re-

quired all his life, he will appear sane enough to deceive non-expert judgment and may soon be free.

His unrestrained freedom would be a mistake and a wrong to him and to those related to him and to the community. For men like him we see that the provisions of the law are inadequate. He has needed from his childhood and youth till now a life regulated by lawful guardianship along lines of normal inhibition to prevent those insanoid displays in his career and those brain unsteady and mind damaging habits which, with insane aptitude and insanoid acts, tend to positive, active insanity. Will the state ever provide for the care, the restraint, the rearing, reforming guardianship of its insanoids before overt acts of positive insanity forfeit their right to even a regulated liberty outside of lunatic asylums.*

Unrestrained youths all over the country with inherent instability of psychic center nerve element unwilling or incapable of exercising normal mind restraint over evil proclivity are following in this unfortunate's footsteps and walking, when not eagerly running, to mental destruction. These are they who have been ungenerously classed as the "fools who are not all dead yet," by such as do not understand their inherent proclivity of psychopathic infirmity.

Proper law created institutions for and regulation of the insanoids, by which I mean those who have the insane temperament with erratic displays and insane-like fulminations or psychic storms, with or without slight exciting causes, resulting from latent tendency to psychic instability of speech or conduct, should be created. Trained guardians like trained nurses for the otherwise ill, should be provided for and assigned to the care of these partly insane—the *demi fous* of our French confreres in psychiatry. A modified liberty for these semi-responsibles even under habeas corpus and after

*"Dr. Henry Maudsley has offered to the London County Council \$1 0,000 toward a hospital for mental diseases. This noted alienist said that as a physician who has been engaged in the study and treatment of mental disorders for more than half a century he has been deeply impressed with the necessity for a hospital, the main object of which would be: 1, The early treatment of patients with acute mental disorder, with a view, so far as possible, to prevent the necessity of sending them to the county asylums; 2, to promote exact scientific research into the causes and pathology of insanity, with the hope that much may yet be done for its prevention and successful treatment; and, 3, to serve as an educational institution in which medical students might obtain good clinical instruction." A better provision would be state, county and city sanitarium for restraint and treatment of insanoids.

acquittal of crime on the ground of insanity at the time of the criminal act should only be allowed them.

We vaccinate against variola and convert small-pox infection even in confluent form into the milder and harmless varioloid or avoid the likelihood of either. Why not also a lawfully, as well as medically, regulated prevention against the often fearful and tragic tendencies of the inborn insane temperament.

Those who have never had personal experience with small-pox in the unvaccinated and the milder varioloid among the vaccinated in their families, may not believe in preventive vaccination. A similar feeling may prevail among the unafflicted as to the modification of the insane diathesis. But the possibility of modifying and of ultimately eradicating both exists through methods known to physical and cerebro-psychic therapeutic science.

The words of Macaulay, writing on the death of Queen Mary in 1694, transferred to a recent Illinois Health Board report relative to the smallpox scourge of that day, referring to this dread scourge "leaving on those whose lives it spared the hideous traces of its power, turning the babe into a changeling at which the mother shuddered and making the eyes and cheeks of the betrothed maiden objects of horror", apply well to the unmodified unsuppressed psychopathic diathesis, with this addition, that the speech and conduct are so psychopathically tainted that the friend, the lover, the blood bound kindred are made to shudder and mourn and dread and flee or are more often made sacrifices.

The suicides of insanoids, so often lamented in communities are not infrequently self immolation benefits to self, to contemporary communities and to posterity, thus freed from the infliction of possible descendants similarly unfit for normal psychic life and its continuation through descending generations. Society should have security even against the possible and unexpected brain storms of certain of the so-called semi-insane and the semi-responsibles—the "*demi fous et demi responsables*" about which Grasset writes so well, these victims of *demi peans de santi*. The world should be

guarded against them in a protective manner though not always necessarily by insane asylum's sequestration, against even the complete freedom procurable by writ of habeas corpus. An insanoid is not always the harmless crank he is regarded. He may pass at times and suddenly under the great and adverse brain strain to which too many of them are often subjected through their provocative vagaries of mind, into positive destructive insanity, as the insanoid paranoiac Guiteau did when he murdered President Garfield, and as the paranoid Czolgosz did when he sought and killed President McKinley, and as Booth probably was when he assassinated the revered immortal Lincoln, and the man in the tree before the White House who shot at President Jackson.

Psychic hygiene must advance to the right knowledge and care and eradication of the psychopathic diathesis, the insanoids who inherit it and the paranoiacs and others now too little regarded as forms of insane inclination and display, now living and classed by the populace as among the normally rational, though they are not so in fact.

An insane person like Thaw, dominated by varying insane impulses and insanoid ideas, sometimes dormant but ready to destructively explode at any moment like a mine of dynamite when the spark of passion is applied, should never again be absolutely and completely free in or out of an asylum. He should never be allowed liquor as a beverage. It is a psychotherapeutic error to allow alcoholic paralysants to be used at the suggestion of appetite. His brain is not fitted for normal tolerance of alcohol even in moderation. He should never voluntarily drink again and no one should give it to him even as a medicine, unless in some grave emergency of heart failure, such as is not now apparent and then only in measured quantity as a medicine. In him the latent proclivity to insanity was brought into intensive action through his youthful drink experience, cigarettes and sensuous habits. More intensive and sooner than if he had never drank at all, nor given his depressing, devitalizing habits the full control of his life. But it must be borne in mind that in creatures of such unfortunate neuro morbid endowment alcoholic and other excessive excite-

ments are often sought and when once indulged in, the personal restraint that gives moderation is difficult.

Preaching temperance and moderation to the insane temperament once aroused from its latent sleep into morbid neurone activity is like commanding the epileptic convulsion to cease and expecting it to obey. As well might one command the waves of the ocean to cease to roar or roll. The waters of the sea may be diverted into more tranquil channels and so, often, may the propensity of the insane temperament by change of locality and removal from environing sources of morbid excitation.

The following data omitted from the body of the article will be found germane as facilitating to recall the facts of the trial:

April 23, 1905—Harry K. Thaw and Evelyn Nesbit were married at the Thaw home in Pittsburg.

June 25, 1906—Thaw shot and killed Stanford White on the Madison Square Roof Garden during the progress of a play called *Mlle. Champagne*. Arrested and taken to the tenderloin Police Station.

June 28—Thaw indicted for murder in the first degree.

January 23, 1907—Trial began before Justice Fitzgerald.

March 20—Trial halted by District Attorney Jerome's request for the appointment of a lunacy commission.

April 4—Thaw declared sane by the commission.

April 12—Jury disagreed, after being out forty-eight hours, and was discharged.

January 6, 1908—Second trial began.

February 1.—Verdict rendered of not guilty, on grounds of insanity.

Matteawan, N. Y., February 1—Harry K. Thaw assigned to the observation ward of the State Hospital for the Criminal Insane, where he will remain under observation until the authorities can note his mental condition and make some definite arrangements for his future stay in the institution. The new patient slept the first night in a small iron bed in a dormitory, where about fifty other men are quartered. An attendant is on guard constantly to prevent any accident.

Dr. Robert Lamb, head of the institution, will allow Thaw it is reported any reasonable luxuries in the way of food, even wine, if he cared to pay extra. A mistake as to the wine, if correctly reported. Probably a reportorial error.

The three men recently shot in the Boston State House by a paranoiac who, at the request of his mother, had been released from the asylum on parole after a three months confinement, upon which the *Medical Times* descants, should "give us pause" as to Thaw's precipitate release. Thaw is a wine bibber and a cigarette and cigar slave. Now that the deed has been done it is on all hands realized that the man Steele, who did the Boston shooting, should never have been left without the strictest surveillance. He was possessed of the delusion of persecution—a most dangerous form of that disease, which in this patient, who is thirty seven years of age, just the age of Thaw, had long passed all possibility of cure. When the stage described by Regis as that of "delusive unfolding," which presently merges into that of "transformation of personality" has been entered, the sufferer becomes quite unaccountable for his acts.

The absolute necessity of confining these cases in a way to preclude the possibility of their injuring their fellows, seems not to be generally apparent to physicians or the laity. Such patients appear, except with regard to their purely functional but very grave disease, to be normal. At the worst they seem but harmless "cranks". They are in fact extraordinarily apt at dissimulation, frequently deceiving friends, attendants and even physicians. Their power of acute and logical reasoning is likely to be wonderful—to the degree, indeed, of exciting the alienist's suspicions. The autobiography of a paranoiac which Peterson reveals to us, is a beautifully written manuscript, which under the circumstances in which it was written, is a clear example of forceful, cogent and coherent writing. The patient who wrote it was so dangerously insane that he was confined for the most of his life to the asylum in which he wrote this valuable work. Peterson describes it as a very graphic picture of the steady evolution of the malady—"a remarkable self dissection of the

soul's anatomy," and this by "*folie raisonnée*."

Paranoia is a chronic psychosis; its characteristic is a first paranoid conception and later fixed delusion or delusions; there is no marked general mental deterioration apparent, until late in the disease. Appreciable general mental impairment is not common. In the course of time these delusions become as strong and pervasive as logical beliefs. Then they dominate the life and actuate the deeds of the paranoiac. When they become "systematized" they cannot be corrected by argument or experience; the patient cannot be cured of them thus. And when the delusions are of persecution he becomes as dangerous as if in epileptic furor. There is no record of recoveries in well developed cases.

Thaw is probably not recovered. He likely never will be. It is not wise nor right to himself or others to set this insane murderer free. With his morbid mind history, his egotistic delusion, his morbid suspicions and aversions and aptitude for new delusions and aversions his wife may be his next victim. His dangerous life has been spared. Better now save society from any chance of another paranoiac brain storm and a commonwealth the cost of another trial.

Thaw's conduct now is in marked contrast with his appearance at the time of his arrest, impressing doorman Barrett on duty at the police station, where Thaw was brought after the tragedy with his wild staring, protruding eyes, as one who had stabbed or shot himself and "something terrible." His auditory hallucinations as to the voices of children locked up overhead and his delusion that they were being beaten and abused and his demanding their release as testified to by both Barrett and officer Lynch. Yet he has not had his last outburst of maniacal passion, his final morbid fulmination, his last brain storm. While he lives, unless through the lesson of his recent tragic experience and salutary restraint, his life should become most exemplarily free from irregularities and passionate indulgences, abandoning all dissipation and wooing ample timely sleep, his brain will cloud again and the present temporarily repressed and smouldering psychopathy will be revealed in the recurring psychic storms that belong

to his unfortunate tragic malady. He must not again woo the means of psychic instability.

Even now Thaw's dominant demanding, commanding, indiscriminating, morbid egoism, does not permit him to discern the peril he has escaped. He directs as though he were in command of the situation, that an immediate writ of habeas corpus be asked for and that sumptuous quarters be given him. No word of regret that he has sent, without warning, a fellow mortal and a fellow in sin to the bar of God and bereaved his family and blighted their lives, his own and his family's, has yet escaped him. His own statement respecting Stanford White, since his acquittal, reveals his delusion of suspicion. White, who did not know he was about to be killed by him and who was not looking at him and was apparently unaware of Thaw's presence, "glared on him fiendishly and he thought he must kill or be killed," Thaw says.

Paranoid diathesis fits the strategems and violences of this morbid brained man, and, more seriously than as Shakespeare enjoined concerning the amusiatic paretic "let no such man be trusted."

The last chapter up to date in the life history of this uniquely erotic young man and his conjugal life partner, is the impending legal annulment of their marriage, based upon his morbid revulsion of feeling and irrational spells of jealous antipathy and violence leading to the annulment sought by his wife because thereof and because of the display of insanity at the time of Thaw's marriage to his wife Evelyn. This display of insanity was shown in his accepting her as his wife after she had been his publicly acknowledged mistress, after she had been the confessed mistress of Stanford White, after she had defamed him at the instance of Stanford White and in the German castle life and episodes there, his causeless irascible violences of temper there and elsewhere and by his ignoring the proprieties of life in his hotel residences and in his seeming obliviousness of these improprieties leading to his repeated rejection and expulsion from public hostleries of character.

If acting out of rational harmony with one's environment be one of the cardinal psychical symptoms of insanity, he has

displayed this sign most markedly. The most of the experts in his case only failed to connect it inseparably, where it evidently belonged, with a morbid state of brain.

This dithyrambic creature, neglected in childhood and youth of needed normal inhibition, mental and moral control rightly exercised and assisted from within and without his own brain, with inherent organic aptitude to go wrong, making one continual Bacchanalian orgie of love and the lusts of life, came naturally and with aid of wrong environment and rearing for such an organism, to that final psychic neurone instability, *in extremis*, to which he was congenitally inclined. Misfortune was on the neurotic trail of this gilded youth.

The natural culmination of that morbid instability of psychic neurone centers was calamity to self and family, and the crime of crimes forbidden in the decalogue, though murder was not the only crime committed by this psychopathic murderer, whose life should, from now to the tomb, be one of only judicially regulated control.

The liberty of such unsafe creatures to self and those about them should be one guided and restrained by the constant guardianship of more normal minds. To such matrimony should be inhibited by law and communities saved from others of similar pathetic proclivity of organic psychic distortion. If not prohibited, then the influence of the pudic nerve area should by surgical recourse be made nil in such. It should be made nil in its fatal dominance over such a harmful life in society and the further generation of such abnormal brain element arrested. Better racial suicide than the further propagation of such disturbers and destroyers of normal life and happiness.

That this man's present plight might have been averted is shown in the escape from notable psychopathy in his two half-brothers, who, having lead a different life and more stably environed from childhood and youth to established manhood, and his sisters likewise, escape notable psychopathic display. The psychological lesson in these and similar lives is persistent psychologic inhibition of unstable abnormal inclination during the period of the cerebral evolution, until cerebropsy-

chic stability is well established. To this end the idea of moral responsibility and religious accountability, now too much neglected in the education of childhood and youth both in home and school, should not be neglected in the practical rearing of the rising generation.

What can be done aside from preventing the conception of the psychopathically unfit to live, should be done as completely as possible neurone stability cultivation of steadying and non-exhausting educational methods with the unstable psychic neurone already sent on its possibly erratic course in the world.

THE SEX-DETERMINANT IN MORMON THEOLOGY.

A Study in the Erotogenesis of Religion.

BY THEODORE SCHROEDER,
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YEARS ago, while a resident of Utah, I was engaged in an elaborate study of mormonism for purely controversial purposes. At that time I had never heard that anyone asserted a psychic co-relation between religion and sensualism. My reading of Mormon literature convinced me of a concurrence of great religious and sexual enthusiasm, and a predominance of sexual reasons for most of the peculiarities of Mormon theology. This first suggested to me a causal relation between religion and lust. Since, many religions have been examined and I find that conditions which at first were thought peculiar to Mormonism are in fact quite general. Thus I was led to the very broad generalization which I announced in the *Alienist and Neurologist* for August, 1907, under the title of The "Erotogenesis of Religion," and further discussed in the *Am. Jour. of Religious Psychology*, 1908. (See also *Zeitschrift für Religionspsychologie*, March, 1908.)

In the present essay I will recount some of those facts of Mormonism which first led me to the wider fields of investigation into the psychology of religion, from the view-point of sexual psychology. I will begin by first stating some fragmentary information as to the character of the revival excitement during which Mormon theology was evolved, and then follow this with a study of that theology, and my explanation of the psychic processes by which sensualism is transformed into the testimony of the "holy spirit" and the frenzy of fanaticism. At some other time I will expose the accompanying abnormal sexual enthusiasm, as these worked themselves out in the polygamous social system.

THE KIRTLAND REVIVAL.

Most esoteric Mormonism is the outgrowth of, or intertwined with, the ceremonials and practice of polygamy. Mormon polygamy found its beginning in 1831 at or near Kirtland, Ohio, (1) (*Deseret News* Nov. 23- '78-, *Outlines of Ecclesiastical History*, 428) where raged within the church a most extraordinary religious excitement. This revival was mainly the work of Sidney Rigdon, a skilled revivalist and intense enthusiast who theretofore had been one of the founders of the "Christian" or "Campbellite" church and at the time of his conversion to Mormonism was one of its most popular preachers. The method of working up the enthusiasm was that ordinarily employed by the orthodox revivalists.

When the Mormons of that time were about to partake of the sacrament, the doors and windows would be closed and scenes enacted which resembled, and in fact were the conduct of the insane. "Many false spirits were introduced, many strange visions were seen," (2) (19 *Millennial Star*, 278,) among them being Martin Harris' vision of the devil who "looked like a jackass and he had hair like a mouse." (3) (Braden-Kelly Debate, 387.) At the dead hour of night young men might be seen running over the fields and hills in pursuit as they said, of balls of fire, lights, etc., which they saw moving through the air. (4) (Howe's *Mormonism Unveiled*, 105.) "Black Pete," a negro convert, caught sight of a revelation carried by black angels with kinky hair and made chase to secure the treasure. Utterly blind to his surroundings he in his mad infatuation ran over the edge of a precipice, dropping through the branches of a tree into Chagrin River. (5) (14 *Deseret News* 90: 19 *Millennial Star*, 278.)

These fits of contagious enthusiasm usually came on after prayer meetings, which were held almost every evening. The gift of miracles and the power of the Holy Ghost were imparted by the laying on of hands and followed by strange manifestations. Many would fall upon the floor, remaining there for some time in seeming lifelessness, (6) (Howe's *Mormonism Unveiled*, 104-5.) sometimes claiming that the "Spirit of God" had thrown them down, thus passing them through

a new and miraculous form of death which had imparted to them immortality. (7) (15 *Millennial Star*, 285.) The young men and young women who probably were by abstinence living unnatural sex lives, besides undergoing the nervous disturbances incident to adolescence and pubescence, were more particularly subject to these deliriums. They would exhibit all the apish actions imaginable, making the most ridiculous grimaces, creeping upon all fours, rolling upon the frozen ground, go through all the Indian modes of warfare, such as knocking down, scalping, ripping open and tearing out the bowels. (8) (Howe's *Mormonism Unveiled*, 105.) At other times they would run through the fields, get upon stumps, preach to imaginary congregations, enter the water, perform baptismal and other ceremonies. Many would have fits of gibbering called "talking in tongues." (9) (19 *Millennial Star*, 278, Howe's *Mormonism Unveiled*, 105, Braden-Kelly Debate, 388.) Meetings were broken up by the shouting of some brother possessed of the "Holy Ghost." (10) (15 *Millennial Star*, 18: 14 *Deseret News*, 90-91.) Some labored under the hallucinations that they saw angels, others received letters from heaven, still others saw the face of the Saviour. One of the insane while seeming to be endeavoring to jump through the ceiling proclaimed the arrival of "the hosts of heaven and the horsemen." (11) (14 *Deseret News*, 90-91.) Almost a score of prophets arose each securing revelations, performing miracles, and often disputing the genuineness of Smith's title to the prophetic office. (12) (14 *Deseret News*, 90-91: 7 *Journal of Discourses*, 111-2-3: 19 *Millennial Star*, 278-9.)

There seemed danger that the whole Mormon community would become infected by the contagion of this emotional insanity, and this resulted in the prophets' taking alarm and announcing a revelation in which God discountenanced all these excesses. (13) (Tullidge's *Life of Joseph Smith*, 116.)

THE EVOLUTION OF MORMON SENSUALISM.

Those who have studied most carefully the history of fanaticism, and the evidences bearing upon the co-relation of religious frenzy and sexual enthusiasm, will be least surprised to learn that during this Mormon revival-excitement at Kirt-

land, "many yielded to the spirit of adultery," (14) (14 *Deseret News* 91) including apostles and other prominent Mormons, (15) (7 *Journal of Discourses*, 115) and that contemporaneously with this widespread yielding to the spirit of adultery, the mormon prophet first had revealed to him the beauties and "the eternity of the marriage covenant, including a plurality of wives," together with further esoteric doctrines upon the same subject, which have not yet been made public, (16) (*Deseret News*, Nov. 23rd, 1878. *Outlines of Ecclesiastical History*, 428. *Anti-polygamy Standard* and *Mormon Portraits*, 250-251, contain information not elsewhere published as to these beginnings,) unless by inadvertence.

The new convert, at this time, was saluted by the high priests of mormonism with a "kiss of charity," (17) (Howe's *Mormonism Unveiled*, 216.) Under the fostering care of an intense revival excitement, the evolution from the "kiss of charity," through theories of spiritual wifery, to polygamy in the flesh, was a sensual growth by natural and easy stages, which probably reached its highest degree of abnormality in another revival excitement. Between 1855-60, there raged in various parts of Utah another intense religious frenzy, generally known as "The Reformation." (18) (*Rocky Mountain Saints*, 292 and 308.) The emotional phases were quite as pronounced as at Kirtland. In the meantime polygamy had become a publicly avowed church doctrine and practice. All was "marrying and giving in marriage." The divinity of the polygamic institution and the duty to procreate as man's highest obligation to the Deity, were the burden of almost every exhortation. In the average mormon mind, but little "corrupted" by learning, intellectual and sensual pleasures seldom, even momentarily, contest with each other for supremacy. Intellectual incapacity precludes that introspection which alone would enable the mormon to resolve his religio-psychic states into their constituent elements of unreasoned emotion and untamed lust. Mormons once having accepted sex-functioning as the highest duty, and polygamy as the marriage institution offering most opportunity for prolific offspring, and, being constantly under the influence of an en-

vironment which, through preaching and practice, was directing the attention to sex matters, it was unavoidable that abnormal sex appetites should be developed.

Poverty often compelled polygamists to occupy the same bed with two or three wives, and their children to sleep in the same room. (19) (Gunnison's History of the Mormons, 71. Mormon Delusion, 197-204-208-210. Beadle's Life in Utah, 376.) Public discussions of polygamy, in which both the beneficence and sinfulness of their unconventional sexuality were highly over-valued, the vehement exhortation to uphold its practice, and the exigencies of family life in the polygamy of the poor, and nearly all were poor, necessarily centered the attention of all unduly upon matters of sex, and thus in one generation, sex abnormality was being cultivated which perhaps might be transmitted to the next, as a congenital hypertrophy of sex organs, which combined with continual suggestions pregnant with sex-over-valuation created an abnormal predisposition to erotism. Having developed from normal man through revival excitement, to hyperæsthesia sexualis, and having provided the opportunities for excesses, which among such people is best offered by polygamy, there is soon developed a class of men, exhausted by supersatiation in normal sexual indulgence, who, by their psychopathic condition, are irresistibly impelled to search after unusual stimulants for their lagging passions, and whose sexual activity therefore finds expression in the abuse of children, incestuously and otherwise, in sadism, and in pederasty. I have the testimony of a witness somewhat discredited by morbidity of mind, which testimony, if true, would establish beyond a doubt that Bishop John D. Lee and some of his associates in the southern Utah murders of about 1887, were sadists. William Hooper Young, a grandson of Brigham Young, is now for the second time a convict. His present (1903) confinement in a New York penitentiary is for the murder of one Mrs. Pulitzer. The circumstances of the murder indicated very clearly that the murder was executed pursuant to sadistic mania. Both prosecution and defense were unwilling to take chances on the outcome of a trial on the plea of insanity. For one, it might mean electrocution; for

the other, acquittal. Therefore, during the trial, an agreement was reached for a plea of guilty to a lesser degree of murder and a jail sentence. The author has also quite unimpeachable evidence that by several of the older polygamists, living in the year 1880, pederasty was practiced.

This is but the natural and necessary consequence of conditions, such as environed the mormon mass. The development is not in the least unlike the progress of all forms of psychopathia sexualis. With this much by way of suggestion, to aid the lay mind in interpreting the facts, and creating a conviction of antecedent probability in favor of the developments to follow, and some which space limits require me to leave to some future essay, let us examine the growth of this disease in greater detail, with special reference to its influence on Mormon Theology.

MORMON THEOLOGY AND SENSUALISM.

The average mormon being deplorably wanting in every element of higher mental development, and for that reason, as well as by nerve constitution, being of mystic tendencies, was, through intensity of religious emotions and teachings, easily obsessed by sexualism. Thus conditioned sexualism determined its theology, and mysticism read both into the divine mind. The stamp of its degeneracy is upon every feature of the mormon cult, and a sexual reason is at the foundation of most of its peculiar theological "truisms."

The capacity for procreation of specie, instead of being one of many equal and cōordinate bodily functions, is made the "greatest" power of God bestowed upon man, (20) (*Discourses on Celestial Marriage*, 23) and the greatest promise that God gave man, is that given to Abraham to multiply his seed as the sands upon the sea-shore. (21) (*Discourses on Celestial Marriage*, 17.) If sex organs are the beneficent evidence of God's greatest power bestowed upon men, we logically deduce the correlative obligation of men towards God, to beget the greatest possible number of pious offspring (22) (26 *Journal of Discourses*, 181; 1 *Journal of Discourses*, 59.) "We are created for the express purpose of increase." (23) (1 *Journal of Discourses*, 93.) If begetting pious chil-

dren in the greatest number, is our conception of man's highest duty toward God, then naturally since the gods are always but man's objectified ideals, God is represented as a polygamist, (24) (*The Seer*, 37) as also is Jesus Christ, (25) (1 *Journal of Discourses*, 345, 346, 347; *Deseret News*, March 18, '57 p. 13; 1 *The Seer*, 158-9) and the marriage at Cana of Gallilee is proclaimed the marriage of Jesus to Mary, Martha and others. (26) (2 *Journal of Discourses*, 79-80-81-82-210; 4 *Journal of Discourses*, 259; *The Seer* 158-9.) Of course it would be senseless to have a polygamous God unless he could procreate godlets. Procreative powers, therefore, are not only God-given but God-like. Progeny is the direct offspring of God. (27) (Musser's Race Suicide, etc. vs. Children, p. 44.) The Gods are now made to possess all the parts and passions of a perfect man. (28) (19 *Journal of Discourses*, 64; *Deseret News Extra*, quoted in *Utah and the Mormons*, 227; 5 *Times and Seasons*, 613.) Gods, angels and men are all one species, one race and one great family, (29) (Key to Theology, 41; 6 *Journal of Discourses*, 3; 26 *Journal of Discourses*, 368) and Joseph Smith is as much the son of God, as is Jesus. (30) (24 *Millennial Star*, 139; 15 *Journal of Discourses*, 247.) The Gods have power to beget sons and daughters in the spirit world, who, through their occupation of temporal bodies of flesh and bone, are themselves prepared for God-hood and like the great Gods, their fathers, they in turn become possessed of his Godly power of propagating their species through all eternity. (31) (4 *Journal of Discourses*, 54; 15 *Journal of Discourses*, 250-252.)

The necessity of "Tabernacles" of flesh, (32) (4 *Journal of Discourses*, 54) which sons and daughters of God must inhabit for a time as a condition of their development to God-hood, is the reason why the "head God" commanded Eve to multiply and replenish the earth, and thus imposed a like sexual duty upon all Eve's daughters. (33) (Why We Practice Plural Marriage, 7-10-31; *Mormon Delusion*, 212-213.) We are all the literal sons and daughters of God, (34) (68th Annual Conference, 63) and Adam, our first earthly parent, becomes the God of this world and the only God with whom we have to do.

(35) (1 *Journal of Discourses*, 50.) He brought Eve, one of his wives, with him, (36) (1 *Journal of Discourses*, 50) and through him we came into being. Adam, the God of this world, came here from another planet, and having potential immortality. (37) (5 *Millennial Star*, 189; 21 *Journal of Discourses*, 289.) Thus man is literally the offspring of a divine father and mother. (38) (6 *Millennial Star*, 20-21; New Witness for God, 466.) Had it not been for the "fall," Adam would have reigned through all eternity as King with Eve as queen. Through the fall, Adam and his offspring became mortal and their descendants became the earthly and mortal habitation of the spiritual offspring of other Gods. Only through the "fall" of Adam, and our consequent mortality, coupled with the eternity of the mormon marriage covenant, has it been made possible for us to become Gods, (39) (1 *Journal of Discourses*, 59; 19 *Journal of Discourses*, 251; 15 *Millennial Star*, 801; 68th Semi-Annual Conference, 21; 6 *Journal of Discourses*, 4; 21 *Journal of Discourses*, 10) and to have an immortal progeny. (40) (20 *Journal of Discourses*, 155.)

It has already been discovered by the reader that the mormon God has not always been a God, but was once as we are now, and is but an exalted man who sits enthroned in yonder Heaven. (41) (6 *Journal of Discourses*, 3; 26 *Journal of Discourses*, 368; 5 *Times and Seasons*, 613; 1 *Journal of Discourses*, 123; 7 *Journal of Discourses*, 333; 26 *Journal of Discourses*, 368.) Even as Adam is the God of this world, so are Joseph Smith, Brigham Young and all their successors in the prophetic office of the mormon church, each a "God to this people." (42) *Deseret News*, March 18, 1857; also 7 *Deseret News*, 179; 23 *Millennial Star*, 139-140; 2 *Journal of Discourses*, 153-156-159; Temple Lot Case, 356; Tell It All, 316; 68th Semi-Annual Conference, 6; Waites Mormon Prophets, 174; 24 *Millennial Star*, 139; Hyde's Mormonism, 197; 198, 167, 132 and 134; *Deseret News*, June 25th, '56; *Kinsman*, April, 1899; Rocky Mountain Saints, 294; The Mormon Problem, 22.) When all the morning stars sang together and the sons of God shouted for joy, Jesus, and probably Joe, were there, not as the fleshy descendants of our Adam God, for he had not been placed in Missouri, which according to mormons,

contains the Garden of Eden. (43) (Life of John Taylor, 66; Doctrines and Covenants, Sec. 116; *Deseret News*, Oct. 8th, 1856, as quoted in Hyde's Mormonism, p. 175.) They were the spiritual sons and daughters of Gods, who, to the number of millions were awaiting their turn and their opportunity to take "Tabernacles of flesh and bones, until the closing up scene of this creation; all these were present, when God commenced this creation. Jesus was also there and superintended the work, for by Him God made the worlds. * * * * They knew that the creation then being formed was for their abiding place, where their spirits would go and take upon themselves tabernacles of flesh and bones and they rejoiced at the prospect. * * * * They saw that their spirits without tabernacles never could be made perfect, never could be placed in a position to attain great power, dominion and glory like their father." (44) (15 *Journal of Discourses*, 246-247.) The unstated but evident reason is that without their body of flesh they could not procreate subjects over whom they could reign, but must themselves remain subjects. (45) (15 *Journal of Discourses*, 319?)

Thus we all have within us a tangible portion of the Deity and, "it is the Deity within us that causes increase," (46) (1 *Journal of Discourses*, 93; 26 *Journal of Discourses*, 217) and therefore it is our capacity for increase that measures our exaltation or progress toward becoming Gods, and each added wife is but an added means of exaltation in the celestial kingdom. (47) (Record in Case 516 Circuit Court of Appeals, 346-362; 1 *Journal of Discourses*, 61; 15 *Journal of Discourses*, 319.) It is capacity for reproduction that is the only distinction given in mormon literature between the lower and higher degrees of celestial exaltation. (48) (15 *Journal of Discourses*, 252; 21 *Journal of Discourses*, 10; 20 *Journal of Discourses*, 155.) When the "saints" talk about becoming Gods through accepting the testimony of Jesus and complying with mormon ordinances, (49) (Outlines of Ecclesiastical History, 415; Doctrine and Covenants, Sec. 76) they really meant that through the eternity of the marriage covenant, as they alone have the divine power of administering it, they can guarantee to their devotees, the continuance of sex joys

in the hereafter. (50) (1 *Journal of Discourses*, 59; 20 *Journal of Discourses*, 155; It is an error, quite prevalent outside of mormonism, to believe that mormons consider polygamy a proper or permissible condition for all. The fact is not so, even for all mormons. The right to have more than one wife comes as a reward for piety and attaches only to those mormons who have secured special divine sanction. All sexual commerce by a married man and not thus authorized is denounced as adultery and the guilty invite the death penalty therefor under the Mormon doctrine of blood-atonement. (50) (John Taylor in report of interview with O. J. Hollister, 8; 1 *Journal of Discourses*, 61-97; 7 *Journal of Discourses*, 20; 2 *Journal of Discourses*, 100.)

To restore fallen mortal man to the state of Adamic purity and immortality is the mission of mormonism, and eternal marriage, for the solemnization of which it has a divinely authorized monopoly, is a means to that end, "Marriage is regarded by the latter-day saints as a sacrament. Under its high ecclesiastical law it involves an everlasting covenant. That does not end with death. The marriage does not take place in the resurrection, but in time and in this world. It is of the nature of that marriage in the Garden of Eden between a man and a woman in whom then there was no death. It was a wedding of immortals. That which was lost through sin in the 'fall' was restored through obedience and the atonement of Christ in the regeneration, and the resurrection brings the parted pair together again as one, 'no more twain but one flesh'—spiritual [spirit according to Mormonism is but refined matter,] but tangible and eternal. That which is sealed on earth to-day by divinely revealed [mormon] authority is sealed in heaven and remains, in spite of death, immutable and abides forever."

"The family thus formed is the basis of an ever-increasing kingdom and dominion continuing in worlds without end. Marriages are permitted for time only, as not all persons are fitted for the higher conditions and the pure and sacred obligations they impose." (52) (Joseph F. Smith in *The Arena*, May, 1903, p. 452.)

Those, whom the mormon priesthood have not permitted to comply with these ordinances for an eternal marriage, or those who have wilfully foregone the responsibilities of maternity will in heaven be only "ministering angels," (53) (1 *Journal of Discourses*, 65; 6 *Journal of Discourses*, 359; 15 *Journal of Discourses*, 319-321; *Deseret News Extra*, quoted in *Utah and the Mormons*, 227; *Life Among the Mormons*, 132), that is, a sort of celestial scrub-woman to the more exalted mormon, and must remain in servitude without prospect of queenhood or hope of sexualism and the resulting immortal progeny. (54) (15 *Journal of Discourses*, 252; *Discourses on Celestial Marriage*, 3.) Even a man cannot be saved in the hereafter without having a woman at his side, (55) (*Time & Seasons*, July 15th, 1845; *Polygamy or the Veil Lifted*) because without her that procreation, which is the distinguishing feature of Godhood and its pleasures, is absent. Those who are more perfected in Godhood, by having been "sealed in marriage for eternity" will be capacitated to enjoy the relationship of husband and wife, of parent and child in a hundred-fold degree greater than in mortality." (56) (*Discourses on Celestial Marriage*, 3; 5 *Millennial Star*, 190.) Thus heavenly joys are but intensified sensualisms. "Instead of the God-given power of procreation being one of the chief things to pass away it is one of the chief means of exaltation and glory in that great eternity." (57) (*New Witness for God*, 462; 20 *Journal of Discourses*, 155.)

Latter-day saints believe in a literal physical resurrection of the flesh and bone of man. (58) (6 *Millennial Star*, 20; *Rocky Mountain Saints*, 480; *Lecture of R. W. Sloan*, *Salt Lake Herald*, Jan. 11th, 1897; *The Gospel Reflector*, 37 and 244-6.) To them all is material. (59) (20 *Journal of Discourses*, 73.) The eternity of the marriage relation is therefore not a mere mystical union of immaterial and unembodied spirits, as others understand the spiritual, but it means the sex-functioning in heaven of resurrected flesh and bone, men and women begetting spiritual and eternal offspring. (60) (15 *Journal of Discourses*, 320.) The polygamous "home is held sacred by the saints as the beginning of their heaven." (61) (President Joseph F. Smith in *The Arena* for May, 1903,

p. 455.) Those who remain in the flesh after Christ comes, will continue to beget children during the millennium. (62) (*The Gospel Reflector*, 273-275.) According to mormonism the "spiritual" is but refined matter. (63) ("Absurdities of Immaterialism" by Pratt; 6 *Millennial Star*, 19; Life Among Mormons, 118; Key to Theology.) So likewise the Holy Ghost necessarily ceases to be one with God the Father, or God the Son, but they are three distinct personages. (64) Articles of Faith, 162-172-3; *Times and Seasons*, 926; Life Among Mormons, 117; *The Seer*; Doctrine & Covenants, 130, 22.) But a sexual reason must be assigned and Brigham Young accommodates us "If the Son was begotten by the Holy Ghost, it would be very dangerous to baptize and confirm the females and give the Holy Ghost to them, lest he should beget children, to be palmed upon the Elders by the people, bringing the Elders into great difficulties." (65) (1 *Journal of Discourses*, 51; 15 *Millennial Star*, 770). For these reasons, mormon authorities assert that Jesus was begotten by the ordinary human processes, (66) (Apostle Orson Pratt in *The Seer*, p. 158-9) and in his turn he begot children by his polygamous wives. (67) (2 *Journal of Discourses*, 210.)

CONCLUSION.

Thus Mormon theologians have unconsciously exhibited to us, the innermost working of their own minds, by having accurately portrayed to us, Gods of their own creation, made in their own image. These Gods are sensualists, whose exaltation Mormon priests hope to attain through sexualism, and enjoy in a heaven, whose greatest and only advertised bliss will be intensified animalism, prolonged through eternity. Thus mormon theology is seen to be the result of intellectual exigencies imposed by an abnormal sensualism.

And now we come to trace the psychic processes by which lewdness is transformed into that which is believed to be the "Grace of God." In an article entitled "Religion and Sensualism as Connected by Clergymen," (published in the *American Journal of Religious Psychology*, 1908) I showed by the published observations of many clergymen that the

concurrence of great sexual enthusiasm with religious frenzy is not a peculiarity of mormonism, but quite general in all religions. Our interpretation of the foregoing facts of Mormonism, if it is the correct explanation, may serve as a working hypothesis for the interpretation of all the more or less intense experiences of all religionists, who interpret the peculiarities of their "religious" emotions as the inward testimony of the indwelling Holy Ghost.

The revival excitement is always most potent, in the production of religious frenzy, with those whose nervous organism is subject to the disturbances incident to sexual maturing or sexual decline, and upon persons who from unnatural sex lives or general neurosis, are especially susceptible to a profound agitation, from the reasonless sensationalism of revival pulpiteers. The above stated prevailing conditions of converts, the character of the exciting sermons, with the abundance of sexual allegory and insinuations, to induce a conviction of sin, and the extravagant emphasis which the sermonizer puts upon "spiritual" and "divine love" to secure the reaction to a "spiritual exaltation" ascribed to the possession of the Holy Ghost, all these circumstances, with the abundant historical facts, as to their sexual results, unmistakably indicate that the physiological source of all these disturbances is in the sex-nerve-centers. So it comes, unavoidably, that the verbalisms of "spiritual love," true to their source, will find their physiological interpretation and manifestation in sex-passion.

Since an abnormally sensitive and disturbed condition of the reproductive mechanism is the most fruitful soil in which to develop the religious enthusiast, it is reasonable to expect that the sensualism resultant from revival excitement will be abnormally intense. Out of this very abnormality comes the declining power of the restraint imposed by moral conventions, and the overstepping of their bounds, when it comes, is primarily due to subjective causes and not to a repudiation of usual standards due to any reasoned view derived from an objective study of human sex-relations.

In the highly wrought condition of religious excitement some one more ingenious, or more intense than the rest evolves

theories for the spiritualization of the physical appetite, and the ecstatic joy of the convert readily certifies to the inerrancy of any doctrine which has been suggested into his mind and has become to him seemingly an inseparable associate of his ecstatic condition. Thus the sensual origin determines the character of the doctrine evolved, from the necessities which that origin imposed, and thus it furnishes the "superhuman" evidences of its own verity. The convert now "knows because he feels and is firmly convinced because strongly agitated," and that is the "knowledge by faith," and not from reason—the testimony of the Holy Ghost—and at the same time the joy that passeth all understanding. All this is but the misinterpretation of an unidentified sex ecstasy, which in its acute stages evolves all the horrors which can come, and have come, from a combination of the delirium of sensuality and the frenzy of fanaticism.

In its milder stages of abnormality it becomes the determinant of some unconventional code of sex-morals. Here it begins by evolving into theories for the spiritualization of the sexual impulse, accompanied by a mad over-valuation of sex importance. When it is the sinfulness of sensual love that is overestimated, the tendency will be toward an enforced asceticism, propagated through intense moral sentimentalizing. Celibacy as a duty is most likely to be the result, if women are the dominant factor of the group. On the other hand, if men exercise an effective control, the more intense or more ingenious among them will evolve theories for the sanctification of their abnormal lusts. So comes the mad overvaluation of the sacredness of the duty to multiply and replenish the earth, accompanied by the religious enforcement of sexual irregularity such as polygamy, polyandry, or a compulsory promiscuity. Now the religiously determined conscience sanctions in these fanatics what is condemned by the conscience of others, similarly determined.

From such facts as are disclosed by a study of Mormonism and any number of other sects, we may fairly expect to find an explanation for all the varied phenomena of religious life as distinguished from the secular activities, (see

The Arena, January, 1906, for my discussion of this distinction). From an exhaustive study of all religious enthusiasms, such as I have herein partially displayed as to mormonism, it may yet be that the materialist-monist may find a more satisfactory explanation for the riddle of religion, than has yet been offered and it may be this: The ultimate source of all the religion of personal experience is sex, and the essence of its subjective testimony for the truth of its teachings is the mere misinterpretation of an unidentified sex-ecstasy.

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EDITORIAL.

[All Unsigned Editorials are written by the Editor.]

THE HIGH HOSPITAL IN GREAT CITIES with escalier stairways and recreation roof and roof garden and convalescent cots should substitute the present low, noise and dust-environed and enveloped structure.

The pavilion plan and the cottage plan are all right in high altitudes and salubrious country locations. But for the best results it is better to have all patients above the dust street microbic and noise line.

To begin the management of a patient, aerated blood renovation and brain and mind tranquilization are the beginnings of wisdom in practice, especially with neurotics and in surgery after wounds and before operation. The time now is close at hand when even well people will seek in the crowded part of cities to sleep and mostly live "up in the air," for the steel fireproof skyscrapers offer facilities for this sanitary consummation never before obtruded upon the self-protective thoughts of men.

ANTIVIVISECTION ROT.—Our caption is not very elegant, but it comes to us as the malodorous expression of Cambronne as Victor Hugo puts its equivalent synonym into its unaccustomed place in the mouth of this hero of defeat at Waterloo, on reading the following silly arraignment of biologic vivisection by Mrs. Belais, President of the Anti-Vivisection Society, as if creatures were maimed or destroyed or infected by science in the laboratories with needless pain or for "sport or gust."

"In my opinion," says this lady, as the *New York Medico-Legal Journal* reports, "it is not too much to say that a man who has become accustomed to experiments on animals would not hesitate to experiment on the human being if he got a chance. . . . The man who would deliberately infect a dog with rabies to test a new kind of cure for hydrophobia might easily be capable of infecting a human being with the same or a worse disease. . . . Think of the limitless opportunity afforded by the free dispensaries and wards. . . . and how much greater the joy of the investigator in having a human being upon whom to experiment instead of a mere dog! Vivisection certainly will lead to such experiments, if it has not done so already. . . ."

Would Mrs. Belais kill a rat or rejoice that someone else killed it to keep it from getting up her skirts or biting her? Would she catch "the poor thing" in a trap or poison it to keep it from poisoning her food or biting the children in the cradles? And if she would, would she kill a man?

Woman is not tender toward rats or snakes. Her snake fear and killing instinct inherited from our ancient mother at the time of the Garden of Eden episode of initial iniquity, according to Bible story, is plain enough and would show itself in execution did not her fear and man's pity cause man to vivisect or otherwise kill them.

Clark Bell in an apropos article on "Animal Experimentation in Scientific Research," *March Medico-Legal Journal*, says:

"Is this the tone and temper in which a great public question should be discussed?"

Quoting from the *New York Sun*, he says farther:

"Charles Darwin, the most humane of men, was not far wrong in his forecast of the consequences of indiscriminate lawmaking in this matter. "If stringent laws are passed," he wrote in 1875, 'and this is likely, seeing how unscientific the House of Commons is, and that the gentlemen of England are humane, as long as their sports are not considered, which entail a hundred- or a thousandfold more suffering than the experiments of physiologists—if such laws are passed, the result will assuredly be that physiology, which has been within the last few years at a standstill in England, will languish or quite cease.' "

The writer says: "It is not only absurd, but an outrage upon a noble profession to assume that its members are inhuman, cruel, brutal or bloody minded.

The killing of a calf by cutting its throat with a knife is a thousandfold more bloody and horrifying to the human spectator, and much more cruel and apparently brutal than any ten operations in vivisection, when the work is in the hands of skillful, humane, intelligent and learned men acting on a high and powerfully incited duty, pursuing a careful, conscientious study in useful scientific research for noble and praiseworthy ends.

England has made a most terrible mistake in listening to much such a cry as has now been raised by emotion and misguided and ignorant sentimentality, and do not let us fall into the error she now must lament.

Lord Lister, one of the ablest of the British scientists, who in speaking of the English act in restraint of animal experimentation, said: "The act resulted in 'hampering and sometimes entirely preventing legitimate and beneficial investigation.' In his opinion 'it serves no good purpose and interferes seriously with inquiries which are of paramount importance to mankind.' "

The eminent scientist, Sir Lauder Brunton, has been compelled to publicly state, "It has interfered to an enormous extent with physiologic work," and to add as a reproach upon the laws of his own country: "In some of my investiga-

tions," says Brunton, "the object of which was simply to find out what the action of certain medicines was, I have been obliged to go to Paris to carry on my research in a foreign laboratory."

AGES OF THE AGED.—Of thirteen recent deaths of noted persons recorded in *Leslie's Weekly* for February 13th, 1908, seven reached the age of sixty-nine and upwards and of the seven two were eighty-nine, one was eighty-one, one was seventy-eight, one was seventy-one, one was seventy and one was sixty-nine, as follows: Cardinal Francois M. B. Richard, archbishop of Paris, at Paris, January 28th, aged eighty-nine. Professor Jos. A. Gillett, leading educator and acting president of the New York Normal College at New York, January 30th, aged seventy-eight. Burr Robbins, last of the prominent old time circus men of the United States, at Buena Park, Ills., January 30th, aged seventy. David Johnson, an American landscape painter, at Walden, N. Y., January 30th, aged eighty-one; Sir Henry W. Tyler, formerly president of the Grand Trunk Railway, in Canada, at London, England, January 30th, aged seventy-one.; Rev. R. J. A. Edgren, founder of the Swedish Baptist Theological Seminary, Chicago, and a prominent theological writer, at Oakland, Cal., January 26th, aged sixty-nine, and Mrs. Roxana J. P. Church, one of the flower girls who greeted Lafayette in Boston in 1824, at Chicago, January 30th, aged eighty-nine.

THE GULL AND GULLED AND GULLIBLE ILL.—Many years ago, "a retired minister whose sands of life had near run out," heralded to a suffering world not the "saving grace of our Divine Master whose blood cleanseth from all iniquity," for it had not cleansed him, but a wonderful cure for consumption, free as the grace of God. This was a prescription whose ingredients were named though not free. Any druggist might furnish them for a price. Among the ingredients of this free prescription, as sent by mail, was "Extractum Blogetti;" unfortunately the druggist could not get this constituent except from the sacred place—the bible house, and only from the man whose sands of life were so fast running out, and who had so generously advised a suffering world of the fact, that sufferers

might send in hurry orders before this retired clergyman might expire. The sands of life of this benevolent retired clergyman, who by the way, was a quack medicine maker and faker in sacerdotal disguise, have long since run out. He has followed his victims of misplaced confidence long ago and found his place in the Ananias class of Beezeleub's calorific country and Extract of Blogetti is inert and its virtues are nil, *non est* and dead. But the same old trick, less piously proclaimed greets us in similar forms of free prescriptions in the enlightened and people-serving press.

Blogetti has gone out, but other life-destroying substitutes, "simple prescriptions you may fill at any drug store," all excepting one ingredient and the druggist will send for it if you ask for the prescription and have the price of the free, benevolent prescription, and nothing will be said about the sands of life running out.

Individuals of this race of gulls fall and fail but the class keeps on multiplying forever. The gullible can always be gulled with the aid of the daily papers and they make no announcement of their piety to help in the misleading, as such an announcement would be superfluous.

THE SECOND CONGRESS ON SLEEPING SICKNESS sat wide-awake, early in April with Lord Fitzmaurice presiding. All stayed awake long enough to draft some good advice to their several governments concerning preventive and restrictive legislation. But now comes Oskar Klotz, M. D. of the pathological laboratory of the Royal Victoria Hospital, to relate the discovery by himself and Dr. Rankin of the trypanozomes of this sleeping sickness in the wide-awake rats of that institution and in a Montreal grocery.

The fact is that the parasite is common to the house rat in other cities. Some say it is as common to rats as fleas are to dogs.

In San Francisco, Oakland Point, Richmond and Emeryville, California, says *The Hospital*, of 1,371 rats examined bacteriologically nineteen were found to be infected with the bacillus pestis. "Flea censuses" are made by combing out and counting the fleas from previously chloroformed rats.

The percentage of plague-infected rats is on the decrease, being about 0.7 per cent of the number examined, and plague is practically at a standstill, no case having occurred in San Francisco since December 20. Stringent precautions are being taken to render buildings and stables rat-proof, and the use of metal garbage cans has been ordered. San Francisco has special reason to be concerned about the disease on account of its floating cosmopolitan population, and the rest of the civilized world has reason to be gratified at these active measures, as the city might easily form a dangerous focus of infection to other communities if it fell a prey to a serious outbreak of plague.

THE TOO COMMON BRAIN OVERSTRAIN of railway employees had a recent illustration in the sequent brain exhaustion and suicide of a Western Union telegrapher who kept at his key for fifty consecutive hours after the late San Francisco earthquake. Though profoundly exhausted from the excessive brain strain he took another similar position in a Chicago suburb station of C. M. and St. P. R. R. and succumbed to the suicidal impulse of psychasthenia after continuing too steadily at work before perfect nervous recuperation came to him. Deaths of this kind may be credited to cerebraesthesia begun in seismic shock psychosis engrafted on brain exhaustion. There were many other cases like his, following the San Francisco quake and fire.

EUGENICS as defined by Galton is "the study of a genesis under social control that may improve or impair the racial qualities of future generations either physically or mentally," this includes "inheritance, environment, nurture, health and disease, vigor and impotence, intelligence and stupidity, conscientiousness and irresponsibility, clean living and license, and sanitation in its broadest sense," and the transmission of these qualities and the regulation and prevention thereof.

"Eugenics," says Pearson, "had reached a certain stage of development when Plato first wrote his *Laws*; its pilot is "biometrics."

We may prevent, but we can not yet accurately measure, the entail of a psychopathic diathesis though responsibility of transmission is great and bad heredity should be interdicted by law.

MEDICAL BREACH OF TRUST.—Dr. John B. Roberts, in a paper before the Philadelphia Branch of the T. S., looks upon the prescribing of proprietaries of indefinite or concealed composition as a breach of trust. It is an association of clinico-therapeutic experience. It is know-nothing therapeutics. It is presumption on the part of the proprietary promoters that the average doctor goes it blind in prescribing. It is assuming to practice medicine for the physician. Publish your precise therapeutic formulae such as will stand chemical test and let us continue to use such as are deserving of our therapeutic confidence and commendable for elegance and superiority of preparation.

A good manufacturing pharmacist has no more to fear from honest publicity to the profession than an honest good man has to fear from his true biography. The meritorious will live. The non-meritorious ought to die even though they go to the blind confiding public and the newspapers for support.

THE TREATMENT OF DISEASE consists in the conquering by mitigating, minimizing, mollifying, preventing or destroying its cause—microbic or chemically haemotoxic or neurotoxic cause; and in augmenting, strengthening, fortifying, resistive processes in the organism and in its environment. This resistance is accomplished by hemic and neurone reconstruction and entonement and to this end environment and entoning and reconstructive psychic influence as well as suitable medication contribute. This means the treatment of the entire patient, whatever the special local morbid conditions manifested.

A word of hope fitly spoken, "how good it is" by nurse or friend or physician and depressing influences of speech or act or food or environment and nasty, nauseating medicines excluded and all unnecessary annoyances or pain avoided.

The doctor or nurse who approaches a patient with a

malodorous breath from alcohol, tobacco, or other cause, whose appearances are not neat or whose manners are not agreeable, psychically harms and physically hurts the patient, embarrassing recovery processes. All physicians should be psychiaters in the sense of avoiding everything possible not agreeable to the patient.

SANITARY RIGHTS.—Dr. Howard A. Kelly says: "Let us constitute a kicking society from Maine to California and insist on clean streets, clean houses, clean public buildings, and clean cars. Let it be recognized as a grave offense and an insult to force a neighbor to inhale myriads of pathogenic germs. The primary inviolable right of every man is to pure air and pure water and sunlight when the sun is shining. See my brethren, that he is not robbed of his rights.

To this may be added pure milk for the babies, pure meat and vegetables and fruits, pastry and confections not dust saturated in transit through dirty public streets or exposure for sale uncovered in store or street and freedom from distracting public noises of the steam whistle, deathly screeching autocar, noisy "bikers" and hawkers, noisy newsboys following and howling after one another in street cars, the flap flap flat wheel of the city tram cars arousing the neighborhood at nights and needlessly disturbing the sick and nervous at all times. Reasonable exemption from these is a sanitary right. Exemption therefrom belongs to our constitutionally guaranteed right to life, liberty and the pursuit of happiness and escape from the untimely clutches of the smiling undertaker, ever ready to cover us with his sombre box and the thanatoid trappings of his trade.

THE ESPERANTO PEOPLE, not content with any one or two of the many languages which have come down to us from the Tower of Babel, which have been considered by most of the world sufficient for all the practical purposes of mankind, having kept the nations of the world, like the great seas and mountains reasonably separate from each other, until such a time as they could fairly well come together and evolve the Hague Peace Congress, have not only got their universal

language to going to their satisfaction but they are seeking to form an Esperanto Republic where they can converse with each other in a new tongue unknown to the most of the world.

Professor Gustave Roy, of St. Givons College (how shall we spell and pronounce these names in Esperanto?) very appropriately purposes, according to the Hearst News Service: to "Convert the derelict province of Moresnet, where the frontiers of Holland, Belgium and Germany meet, into a little independent state, inhabited and governed by Esperantists, where Esperanto shall be the 'native tongue.' The present inhabitants—half German half Belgian—number in all about three thousand."

"The name suggested for this new Utopia, is Amikejo, the Esperanto for 'friendship.' There will be no taxes in Amikejo, the revenue being derived from subscriptions from Esperantists in all parts of the world, and from a proposed casino to be established there. There will be an Esperanto college, a chamber for the protection of Esperantist interests, an Esperanto theater and an Esperanto newspaper."

There ought to be enough confusion of tongues in this strip of the world's geography to make Esperanto and Volapuk natural and easy of evolution even without Professor Roy and his colleagues, none of whom have yet proposed a term in Esperanto for the paranoiac jargon which suggests itself in connection with this proposed new linguistic colony.

THE SENTIMENTAL CRANKS.—In reply to a petition coming from Virginia for a pardon for Jesse Pomeroy, (*Boston Medical and Surgical Journal*), Governor Guild of Massachusetts, declines to comply, and adds that "Massachusetts cares neither for lynch executions nor for lynch pardons." Jesse Pomeroy should stay where he is in spite of appeals of sentimentalists, very properly observes this well-known periodical.

It will be remembered that Jesse Pomeroy is the imbecile who murdered "just for fun" a young companion at play in a Boston basement.

Why should this boy, now grown to physical virile manhood be, turned loose unemasculated, perhaps to propagate more of his vicious kind? Believers in the conservation of

brain integrity of the people of the state can no more consent to the unqualified freedom of this moral monster than to the liberation of lepers and plague victims among the people. Nay more, they may not only contaminate the breed of citizenship, now none too pure, but also the ballot box and candidature that is presumed to give us representative statesmen to govern the land.

AS THE OSTEOPATH LEARNS a little of real medicine, he branches out with the egotism of a little learning, which with him is always a dangerous thing, with explanations of pathological relations according to his peculiar ideas or rather interests and thus he practices unlawful medicine. The St. Louis Osteopathic Society has heard from the dentists of alveolar pyorrhoea, for which sensible dentists evacuate the pus from the tooth socket and gums and employ extraction and antiseptics. But the osteopaths with their usual eye and mind trained to business strained a point and located the cause of the trouble in a strain or misplaced vertebra requiring osteopathic massage and the discoverer of this wonderful relation asserts that over seventy per cent of the dentists' patients have this remarkable gum and spinal trouble. The moral of which is, when your gums are full of pus pass the dentist by and drop in on the bone manipulator. He will twist out your pyorrhoea and he will probably turn his attention next time to piles in order to make both ends meet in his wonderful business. He has already set a broken neck of forty years duration and the victim yet lives.

EMBELLISHED HOSPITAL REPORTS are becoming a growing feature, much to the better understanding on the part of the people of the pains taken by the managements thereof to make the environment of the insane pleasing and restful to the eye and heart and therefore curative. Besides the usual showing of the administration building and wings such as all reports show now and some scenes about the grounds, some reports, like the Butler Hospital at Providence, show the conservatory, handicraft shop, a brook and river, ravine and sea scenes, and most of them show lodge-houses and wards of philanthropic donors, etc. The Butler Hospital shows at

its farm entrance one of the oldest houses in Rhode Island. This is a feature for patients to look at and talk about rationally.

THE IMPORTANCE OF OCCUPATION AS A MEANS OF TREATMENT IS INSISTED UPON BY HOSPITALS FOR THE INSANE WHOSE REPORTS COME TO US.—Hard as it is for a healthy man to be inactive and without definite work, says the report before us, it is still harder for the self introspective invalid to be thrown upon his own slender resources for diversion. Every experienced medical officer in a hospital like ours, knows how often it happens that improvement seems to date from the first time a patient enters a shop or work room and begins to forget his woes in an enlistment of interests outside of self.

“Get leave to work

In this world—’tis the best you get at all:

Be sure ’tis better than what you work to get.”

—Butler Hospital Report.

The weave room is mentioned in this report. The looms have been abandoned at some state asylums, but it is a good occupation for women to weave carpets for the floors and make the garments they wear and for men to work in the shops or garden or on the farm all under right surveillance, of course.

WHAT IS A CURE? is asked by the *National Druggist* with reference to a certain proprietary “Cure for Hedake, Brane Fude” thus facetiously spelled. This question arose according to the *Literary Digest*, in connection with the prosecution of several Washington druggists, indicated under the pure food laws for selling this remarkably designated compound. Dr. Wiley, a man of positive convictions and speech, holds the term “cure” to be false and misleading, even when falsely spelled.

The term “remedy,” as signifying an agent for relief of headache as a symptom, and “cure” as a synonym therefor, need not necessarily be misleading. But the public should be informed of the exact fact that headache is a symptom of something that causes it and that the real cure of headache depends on further reaching remedial measures than the so-called advertised and patent medicine cures usually are.

The head congestion or its opposite state, anaemia, the toxaemia, the stress upon the brain membranes, their inflammations, etc., are conditions not cured by the ordinary headache medicine, on the patent or proprietary medicine market, though the pain may be relieved by them, while the disease continues, or while nature is changing the causative conditions into cure.

The masking of symptoms and the relief of pain is about as far as the average patent medicine deviser of a cure for disease, ordinarily a drug clerk or a little practice stranded doctor of limited knowledge can see, while the depth and range of the promoter's vision is still less. The aim of the patent medicine promoter is, like that of other promoters, to sell even though the selling of the patient and the ruin of his chance for recovery by delay go with the sale of his goods.

To patent a cure is criminally misleading on the part of the patentee and a governmental wrong. The name of the patent cures that have come and gone with their devisers and the dead of the generations before us, is legion. Where are the kidney cures, the consumption cures, the sands of life cures, the lost manhood cures, the woman's "friend" remedies of other days? Gone into oblivion with their deceived and dead victims. Where is Helmbold with his marvellous buchu, Perkins with his wonder working tractors deceiving the weak-brained Blaisses of other days? Gone glimmering to the shades! But the hydra yet has other heads to be devoured. The fountain of popular therapeutics shows no signs of becoming too dry for the serpent's persisting vitality. It remains to be seen whether the pure food law will prove to be the Hercules that shall destroy it, the patent medicine health and life-destroying monster.

INJURIES TO THE INSANE may be done by inhuman brutal minded nurses violating the golden rule and the rules against violence of all hospitals for the insane but this is rare. The insane more often injure themselves by falls or self-delusive intent or are hurt by inhumane rough handling before reaching the asylum.

The insane also usually make delusional statements as to

unreal injuries, claiming assault when none has been committed or coloring with delusion a self-inflicted real injury. Innocent legislative committees are prone to accept the often irrational statements of patients as they would statements of the sane, as to the verity of personal violence, whereas other statements are received with proper incredulity. A patient, for instance, says he had no stomach, as a patient of the writer maintained, for ninety days, finally conceding that he had one after ninety days of forcible stomach feeding, would not be believed; nor would another one with sound lungs, who insisted that he had a hole through his chest; nor would the patient who claimed that he ran a steamboat under the house during the night be considered truthful as one of the writers' patients did, though he made many true statements about other matters. Victims of the delusive "invisibles and voices," in the unpeopled silent air, may make dying statements of surrounding angels or devils and be understood as deluded, unless they implicate some unfortunate kind attendant in personal assault. Then straightway the attendant becomes a vicious criminal, harming the harmless and helpless. The care of the insane is a thankless occupation, perilous to the good name of their usually most humane servitors. Ignorant prejudice and uncharitable passion too often assail, without real cause, the most worthy. Delusional stories of the insane, which would not be legal testimony in a court of justice, are believed by legislative "solons" and good men are made victims thereby. Andrew McFarland, a former superintendent of the Jacksonville, Illinois, Hospital for the Insane, was deposed through a paranoiac's delusional assaults upon his character, Jones of the Nashville, Tennessee, Hospital, was the victim of physical assault by a deluded patient; Gray, of Utica, N. Y., likewise and other superintendents and assistant physicians, too many to mention, have been.

And pure, kind, good, noble, capable, accomplished, but too sensitive, Tilden Brown, of Bloomingdale, was broken in spirit and ruined under the calumny of false charges made by a newspaper reporter whose chief afterward died in the same hospital, his columns had calumniated.

Calumny may kill even though insanity extenuate it and delusional accusations of violence unreal, may be supported in state asylums for the insane by vengeful grudges of bad employees or by political intrigues and believed by some.

Former personal medical relations with two institutions for the insane and visitorial familiarity with more than a hundred such hospitals, their medical officers and employees, while acting in the line of duty, enables us to say that the insane are safer from harm within than without asylums, safer thus away from home than at home, that inhumanity to them in hospitals is exceptional and that the physicians and nurses who attend far more often receive injury and even death at the hands of patients than the latter do from others. A call of the roll of those devoted men in the field of psychiatry whose lives have been lost in the hazardous duty of caring for the insane would fill a large page in the history of man's sacrifice in the rescue of his fellows.

SIGN SYMPTOM OR SYNDROME OF SYRINGOMYELIA? Before the last meeting of the A. M. A. at the section on Neurology, Dr. Metlar's paper discussed the so-called disassociation syndrome of this central cord lesion presenting the record of an interesting case with illustrations occurring in the practice of Dr. John L. Porter. Approaching the conclusion of his paper he said:

The great importance attached to this correlation of the syndrome, loss of pain and temperature sense with preservation of tactile sense, with the hollowing of the cord, has caused, down to the present day, the iteration and reiteration of two gross errors. These are: 1. That syringomyelia can be all but positively diagnosed by its peculiar sensory manifestations; 2, that these manifestations are in character at least, if not always in origin, syringomyelic. The former error is kept alive by the positiveness with which the text-books assert that the differentiation of syringomyelia from all other diseases is made by the presence of the phenomena of sensory dissociation, and the latter by the way that we constantly refer to the dissociation as the "syringomyelic syndrome."

Had we not been overwhelmed by the blind and unreason-

ing enthusiasm of a certain number of prominent pathologists and clinicians, we might have long ago suspected what we are now learning to be true; that is, that this so-called syringomyelic sensory dissociation is, as Grasset first demonstrated, nothing more or less than a localization sign, the expression of a mere anatomic state, such as aphasia or hemianopsia is, and is not in any sense of the word an indication of a disease or of a particular pathologic process. Nay, more, we would have recognized, long before the overenthusiastic identification of the dissociation of pain and temperature sense from tactile sense with hollowing of the cord, that we had been the observers of the syndrome in many cases and forms of disease other than syringomyelia. We would have discovered, on other grounds than mere coarse pathologic observation with its dangerous tendency to the *post hoc, propter hoc* mode of reasoning, that this now called "syringomyelic syndrome" is a functional and not a mere anatomic manifestation. As a functional manifestation it may occur in many conditions, other than mere hollowing of the cord, that disturb the complexus of cutaneous sensation.

This so-called syringomyelic syndrome, on account of the absence of which in two of Joffroy's cases Déjérine contested the diagnosis, though the autopsy revealed the presence of a medullary cavity, saying that "not a single observation of syringomyelia with autopsy had been made in which muscular atrophy was not accompanied by sensory disturbances," has since been seen many times (Lámarcq and others) where there was no hollowing of the cord and *vice versa* (Newton, Strauss, Schlesinger, Charcot, Obersteiner).

To-day it is an established fact that syringomyelia can exist without the dissociation syndrome and the dissociation syndrome can exist without the syringomyelia. As a syndrome the syringomyelic dissociation has been seen in hydromyelia and hematomyelia, in various forms of neuritis, Morvan's disease and anesthetic leprosy, in Pott's disease of the spine, locomotor ataxia, extra-medullary tumor of the cord, mixed cases of injury to the cord and nerve roots and cervical pachymeningitis. It has often been observed in hysteria and

it has not infrequently been induced by suggestion.

He notes also that Gowers lays stress on the sensory dissociations as symptoms of syringomyelia as most authors do.

Sensory dissociation is not a very valuable symptom *per se*, because in the first place it is as common a phenomenon in the normal as it is in the abnormal state, and in the second place it is dependent not on direct, observable, fixed, histopathologic changes, but on indirect, all but unknown and unexplainable differentiations in the extraneural stimuli and in the processes underlying pure psychosis.

On this subject Dr. Charles K. Mills, Philadelphia, said he did not think that some of the points in Dr. Mettler's paper were well taken. Every neurologist of any considerable experience knows full well, both from living cases and cases with necropsy, that there may be dissociation of sensation in a variety of diseases, such as syringomyelia, peripheral disease, tabes, hemorrhagic myelitis, disease of the parietal lobe, hysteria, etc., but, he said, it is a wrong standpoint to take that this dissociation of sensation is of little or no value to the neurologist. It is not dissociation of sensation which points to syringomyelia, but it is dissociation of sensation with other clinical manifestations. Dr. Mills felt that Dr. Mettler was substituting uncertainty for relative certainty. He has not overturned any of the fundamental positions taken by localizationists.

Dr. L. Harrison Mettler agreed with Dr. Mills that he was substituting an uncertainty for a certainty. He would rather, however, recognize an uncertainty and go slow than believe in a "certainty," which, according to psychologic demonstration, according to the diagnostic findings recorded in literature and according to the latest physiologic observations, is shown not to be such. That is the position which he feels must be taken to-day in regard to the question of sensory dissociation. He wished that he could subscribe to the fact that, in these reactions of the nervous system, certain phenomena of sensation do always make their appearance the same way under the same conditions. The object of his paper, he said,

was not to arouse opposition to well-established facts in diagnosis, prognosis and therapeutics, but to show that in our present state of knowledge in regard to the sensory reaction we must not be too hasty or dogmatic. Dr. Mettler took exception to the assertion that sensory dissociation, as a cardinal symptom, determines whether a given case is one of syringomyelia or not.

The entire communication is an interesting and valuable criticism of a too long and too implicitly and exclusively accepted diagnostic syndrome of syringomyelia.

COFFEE OR TEA for the last daily meal in hospitals for the insane is a dietary error unless so weak as to be little more than water. The beverage prolongs wakefulness which should be avoided while normal somnolence coming on with sunset should be promoted in the psychasthenic and insane. Hot milk, hot water for drink and no meat at night should be the rule for the last meal of the day in institutions for the insane.

A GOOD BEGINNING.—Several American states' laws compel the male applicant for a marriage license to be certified as free from venereal disease.

The *Cincinnati Lancet-Clinic* asks why we require the male only to be certified as free from this disease and refers to insanity as a bar and tuberculosis. This will do for a beginning, but why not require a clean and complete certificate of health for both man and woman as preliminary to matrimony?

ENGINEER PEMBROKE BENTON's back was broken or at least so badly injured in Panama two years ago, under his engine that the best medical men of the Isthmus declared him helpless for life. He can not sue the government and Congress has declined to recompense him.

The Canal Commission and the President have asked for his relief by congressional appropriation. The bill lies dormant with the Committee of Claims. Bring it out and pass it, gentlemen, servants of the people. Let it be known that on the canal as in the army and navy, men maimed or killed on duty are to be cared for and pensioned.

TEMPORARY ANNEXES TO THE ST. LOUIS INSANE ASYLUM should be added at once. They could be economically constructed at once, heat carried to them from the main building and could be used as summer cottages. The conditions out there are horribly inhumane, especially in the old poor house patients' annex department. The patients are said to be confined and crawling over each other like rats in a trap. The Board of Health should not have to refuse any pauper insane or the members of a small wage earner's family.

DR. S. WEIR MITCHELL, of Philadelphia, the celebrated physician and delightful novelist, has recently celebrated his seventy-fifth birthday. We look for much more good work and happy years for our grand old friend.—*Texas Medical News*.

Amen! Dr. Weir Mitchell knows well how to care for and avoid neurotic weariness and we joy in his ripe, hearty and effective years. He is not in brother Osler's prematurely neurasthenic class.

OOPHORECTOMY AND THYROIDECTOMY.—The following statement abstracted from a valuable paper read at the last meeting of the A. M. A. by Dr. Gerry B. Holden of Jacksonville, Fla., and gynecologist to the St. Luke's Hospital may be read to apply to the present surgical propensity to operate on the thyroid for the cure of exophthalmic goitre.

"The history of oöphorectomy presents the same features that we find common to many other operations, capable of accomplishing much good. After its value was finally demonstrated the medical world ran wild for a time; oöphorectomy was done in every sort of condition and hundreds of women were needlessly mutilated. The inevitable reaction came later and now we realize that, while this operation is a procedure of greatest value in its proper place, reckless oöphorectomy, without proper indications, can do an enormous amount of damage."

The long rest in bed, therapeutic suggestion and giving up of and recuperation for the mind and nerve center strain that causes Graves' disease accounts for most of the recov-

eries we have seen recorded. Should any portion of the normal thyroid gland be removed in exophthalmic goitre? No! The same objection is here made now as was made by the *Alienist and Neurologist* when Battey's normal oöphorectomy was at its zenith. Surgery has never been necessary in our experience with our own cases and no case that has continued with us under treatment has failed of recovery. But one failure out of a dozen or more in private practice is on our records and that went to a gynecologist and died. Absolute mind and brain rest and perfect therapeutic tranquilization with regular electrization and the treatment of the entire patient brought the satisfactory results. Our hospital experience has not proven so satisfactory.

Substitute exophthalmic thyroidectomy for oöphorectomy in Dr. Holden's statement and you have the attitude of this journal with reference to the plan and value of this new surgical procedure in this nerve center disease. It would be as logical notwithstanding the asserted conjectural causative relation of the thyroid, to take out the eye. Graves' disease is not grave enough if rightly understood and treated in its undoubted psychoneural relations with treatment of the entire patient to justify the great risk of exsection of this gland or the greater part of it when no surgical disease thereof is found. Normal thyroidectomy for exophthalmic goitre as it is now being done for Graves' disease not proceeding *ab initio* from thyroid disease is not justifiable, except as a brain and mind rest cure.

IF THE BREED AND BREEDING OF HUMAN BEINGS were as studiously considered as "the blood" of domestic animals, if the child's qualities were as much considered as those of horses, dogs or hogs, if the mating and breeding and rearing of the unfit among humans were as carefully guarded against as the raising of these lower animals, human degeneracy and criminality would diminish in this world of blind anthropological ignorance and indifference to the improvement and bettering of humanity.

Judge Brown of Utah, founder of the Juvenile Court system, who lately lectured in St. Louis on "The Boy and the

Law," and who said Missouri spends more money to fatten hogs to die than to prepare boys to live, struck a psychological chord which should vibrate responsive in this and every state for the after welfare of American commonwealths.

BECAUSE THE BONES OF THE AGED ARE MORE BRITTLE than the young, especially among the insane, and the brains of the latter being often more intensely and incessantly active and demanding greater phosphorus salt supply from the blood, especial care should be taken that the aged insane are not grouped with the young and violent in hospital corridors, but should be grouped with their kind. Attendants upon the insane, especially novices at the business, should therefore have the lessons of gentleness in handling these and all insane patients constantly impressed upon them and enforced, not for golden rule reasons alone, but for anatomical also, preventing bone fracture accidents, penetration of vital organs and death from broken bones and shock of falls.

A patient or nurse shoving or striking an old man with force enough to cause him to fall or strike a projecting door or corner, which might not harm a young person, might cause thigh or other limb or rib or cranium fracture and subsequent death. Extremely old persons in hospitals for the insane and without them as well, should be gently handled and guarded from missteps and falls and attendants upon them are not always responsible when their bones are broken.

THE CHANGE OF CHARACTER INSANITY CRITERION found recent exemplification in the conclusions of Doctors Church and Greene in the Snell case at Bloomington, Ill., last February.

Snell's change in feelings toward his only son, without reasonable cause, influenced their judgment as to the character change of insanity and his inability to understand where his natural bounty should have been bestowed post-mortem.

Sometimes the will itself in its omission of the normal claim of consanguinity, omitted without rational cause, is evidence of mental aberration, especially the senile brain decrepid.

VIVISECTION is an old practice. It was done by Galen.

It has given us our knowledge of the circulation of the blood, of respiration, of the function of the nerves, of the spinal cord and brain. It has taught us what was possible in the transplantation of bone, skin-grafting, anæsthesia. It has brought about great advances in our understanding of infectious and contagious diseases. What else there is to discover no one knows. We must temper our sympathies with our reason.

It is gratifying to see a newspaper take a sensible view of this subject and this is the view of the *St. Louis Star*.

FREE LECTURES on Medical Subjects, second series of the Harvard University Course.

This course of free public lectures to be given at the new buildings of the medical school, Boston, on Saturday evenings and Sunday afternoons will supply needed information to the public at this time of blossoming medical fads and blooming therapeutic fallacies among the people.

Saturday evenings at eight o'clock, The Causes of Nervous and Mental Disease, by Dr. Philip Coombes Knapp, Nervous Disorders of Children, by Dr. William N. Bullard, Some of the Nervous Disorders of Adult Life, by Dr. Edward N. Taylor, Alcoholism and Insanity, by Dr. Charles P. Bancroft, Nature and Danger of Syphilis, by Dr. James C. White, The Problem of the "Nervous Temperament," in Children, by Dr. Geo. A. Craigen, Modern Methods for the Cure of the Insane, by Dr. Owen Copp, Mental Hygiene and the Prevention of Insanity, by Dr. George T. Tuttle, What the People Should Know About Tumors, by Howard A. Lothrop, The Cocaine Evil, by Dr. Charles Harrington, Sunday afternoons. Fatigue, Its Effects and Treatment, by Dr. George A. Waterman, Nervous Breakdown, by Dr. James J. Putnam, Popular Falacies Regarding Insanity and the Treatment of the Insane, by Dr. Henry R. Stedman.

In fact the entire course, which includes the uses of common salt, infant feeding, the sick child, the human gait and the laboratory exhibits, paintings and photographs and an exhibit of certain bacteria and animal parasites, etc., is timely and good.

OVERCROWDED CITIES.—From a psychiatric standpoint,

is a theme worthy of professional and public thought and endeavor. *Maxwell's Talisman* for March has an interesting contribution entitled "Homecrafts"—the Talisman of Today for social unrest and industrial discontent is a theme which should enlist thoughtful capitalists and lovers of the welfare of one's fellowman as well as the psychiatrist who aims to secure mentally hygienic living conditions for the people, adults and children included.

THE STORY OF THE HOSPITAL FOR THE INSANE.—The Central Indiana Hospital for the Insane reports during the past year three suicides, fourteen escapes, six returned, three discharged while at home. The report for September 31, 1907, shows the population to be, normal capacity, 1605 beds, forced capacity, 1748 beds, patients enrolled 2035, patients present 1859, patients furloughed, 176.

An analysis of this table shows in use 143 more bedsteads than the hospital's normal capacity, that 430 more patients are enrolled than the normal hospital capacity and 111 more than the forced capacity. These 111 patients sleep upon mattresses wherever room or floor space can be found. Quite a number of those on furlough are liable to return at any time and must be admitted.

This overcrowded condition, as Dr. Edenharter says, is a bar to the proper classification of patients and deprives them of the surroundings necessary for their proper treatment and prevents employees having the necessary accommodations. Many patients applying have been refused admission.

And this is the general story of similar hospitals throughout the land as to overcrowding and inadequate accommodation to which the St. Louis City and most of the Missouri State institutions for the insane are no exception.

Here is an object lesson of psychopathic peril to the people that calls for pause in their vicious indulgences of brain breaking passion, excessive alcoholism, exhausting venery forced education, over-strenuous work and worry, all base forms of sensuous pleasure, sordid, over anxious life endeavor, the development of bad brains, the breeding in and in, of the insanoids and the insane who furnish the most of the world's

tragedies of our day and the population and applicants for place in the city insane hospitals.

THE MEDICAL OFFICER IN THE NAVY.—The Government Printing Office has recently issued a pamphlet containing the reports of the sub-boards, composed of officers of the Medical Corps, the Pay Corps, and the Engineer Corps, which the Navy Personnel Board ignored in the report which it made to the Secretary of the Navy. The recommendation of the medical sub-board, composed of Surgeon-General Rixey, Medical Director G. E. H. Harmon, and Surgeon J. F. Leys was that the Surgeon-General and three of the present Medical Directors have the rank and title of Rear Admiral, the remaining twenty Medical Directors to be Captains, the twenty-five Medical Inspectors to be Commanders, one hundred surgeons to be Lieutenant-Commanders, and 197 Passed Assistant and Assistant Surgeons to have the rank and title of Lieutenant and Lieutenant Junior grade, respectively. In making these recommendations the members of the sub-board argue that the withholding of military titles confers an equivocal rank on a medical officer "which places him in an anomalous position in his relations with officers and men of the navy, with officers of the army and other military organizations and with civilians." They say also of the recommendation that the Surgeon-General and three other medical officers should have the rank of Rear Admiral, that there is no good reason "why flag rank should not be open to officers of the Medical Corps of our navy as in the navies of the other great nations of the world, or why they should be denied a just share in the higher honors toward the end of a lifelong service in the navy."

The publication of these suppressed reports of the sub-boards of the Navy Personnel Board at this particular time is interesting, if not significant, in view of the controversy regarding the medical command of hospital ships which is said to have led to the resignation of Admiral Brownson as Chief of the Bureau of Navigation. The immediate occasion for Admiral Brownson's resignation has not been announced officially, but it is said to be the order assigning Surgeon Charles F. Stokes to the command of the Hospital Ship *Relief*,

in spite of the strong protest of the Chief of the Bureau of Navigation against giving command of a ship to a staff officer without military rank or title. This order has brought the dispute over both these subjects to an acute stage.

That the members of the Medical Corps shall be in command of the hospitals of the navy is a statement that can admit of no question. They are held responsible for the care of the sick and wounded, but the idea of responsibility without authority is farcical. The comparison of the medical histories of the Hispano-American and the Russo-Japanese wars is a little hackneyed, but its lessons must not be forgotten. If it is admitted that a naval hospital on shore should be in command of a medical officer it is evident that a hospital on sea should be under the same control. It is not contended that the navigating officer of a hospital ship should be a medical man, though it is as reasonable that he should be as that a line officer should have authority over the medical treatment. To the civilian mind it seems perfectly feasible to entrust the navigation of the ship to officers of the line while the supreme command rests in a medical officer of superior rank. And this could be if the medical officers had military rank and title equally with the officers of the line, as the sub-board recommends. The *Relief* was formerly an army hospital ship and then was always in command of an officer of the medical corps. Furthermore, as Surgeon-General Rixey has recalled in discussing the appointment of Surgeon Stokes, a joint board of army and navy medical officers, convened by Executive order more than a year ago to attempt to unify the medical service as much as possible, recommended that hospital ships should be commanded by medical officers, and the recommendation was approved by both the Secretary of War and the Secretary of the Navy in general orders. The Japanese naval ships were first commanded by line officers, but later the command was turned over to the medical corps with most satisfactory results. It will, no doubt, ruffle the dignity of some of the young men just out of Annapolis to be placed under the authority of medical officers of twice their years, but after they have recovered from the shock they will find that their

dignity has received no fatal wound and that the sick sailors have a better chance of recovery and of an early return to duty when their treatment is not subject to revision by a layman.
—*Medical Record*, January, 1908.

THE TERM "STAUUNGS-HYPERAEMIE."—Alfred Reginald Allen, M.D., of Philadelphia, Pa., Instructor in Neurology and in Neuropathology in the University of Pa., comments on this subject in the January number of the *Medical Record*, as follows:

"Since the advent of Bier's treatment by hyperemia, the English-speaking scientific world has been casting about in search of a concise descriptive term in its own tongue, with but questionable success.

"We find a number of adjectives used to qualify this hyperemia, such as obstructive, artificial, passive, congestive, and venous, as also the noun, stasis-hyperemia. These terms are all open to the same criticism in that they fail to give a mental picture of the mechanics of *Stauungs-Hyperaemie*; stasis-hyperemia besides conveys a scientifically wrong impression.

"To the philologist there is nothing more apparent than the fact that where one language possesses a single word descriptive of a condition or thing, another language, in order fully to convey the same idea, may have to use a phrase or a whole sentence. The Germans at times apparently avoid this by forming a colossal word by the agglutination of several components.

"Now the condition present in the partial obstruction of venous outflow with a retained arterial ingress, the amount of blood thereby being increased in the part, but the circulation thereof never ceasing, is perfectly expressed by the German term *Stauungs-Hyperaemie*, and but inadequately or falsely expressed by the use of any two-word combination in the English language that we have seen so far in literature.

"I think for this reason it were well to take over bodily this term into our language rather than use any of the English terms which but illy portray what we desire to express."

BRITISH PHYSICIANS are protesting against music as an

accompaniment to dinner. They say that not only does the clash and blare interfere with sociability, and therefore irritate the mind by frequent interruptions and the strain of listening under difficulties, but it interferes with digestion by sending the blood to the brain instead of to the stomach, where at dinner time it belongs.—*Lancet-Clinic*.

It would be more conducive to mental comfort and tranquility to let the tourists eat their meals in peace and quietude than to assault their ears with a brass or string band, unless more tranquilizing pieces of music are served with the gastric menu than we have heard in our several trips across the Atlantic. Besides neurasthenics and nerve center depressed convalescents are advised and often sent to sea for brain rest. For them certainly the English ship and the English idea are best. Besides a lot of neuropaths and psychopaths, restless, loud and irritable, who do not know how much their nerves and brains are out of order take passage on the musically noisy meal time ships who do not know that they need more rest than they can get with bands at meal times in the dining saloons. For such the influence of a sail across the sea should all be restful. For some of our never at ease summer tourists, the best sort of music, if any at all is played, would be the soft, soothing, tranquilizing sleep promoting cadences of a lunatic asylum band. They need rest and level headed passengers need to be rest free from them and their violent, noisy neuropathic conduct at times. From a certain turbulent sort of tourists, whom every traveller across the Atlantic recalls and never forgets, because of their annoyance, they need rest and all the passengers need rest from them.

HOW SOME OF THE PROPRIETARIES REGARD US.—A proprietary firm sends us an interesting reciprocal graft proposition with a picture and biography of the great Virchow and a reference to his cell doctrine and the remarkable information that it is on this doctrine that the formula of —is based.

Some proprietary devisers and promoters seem to believe with Barnum that the people like to be humbugged, es-

pecially the medical contingent thereof. This literature has a number of M. D. endorsement certificates from rural districts.

THE XVITH INTERNATIONAL MEDICAL CONGRESS under the august patronage of his Imperial and Royal Apostolic Majesty. Budapest, 29th, August—to 4th September, 1909. Office: Budapest (Hungary), VIII., Esterhazy-Utca 7. This important scientific body has sent out its preliminary announcements of organization, etc., for the work of the coming year. The sections are already organized and at organizing work. The general officers of the organizations committee are: Honorary President, Prof. Fr. de Koranyi; President, Prof. C. Muller; Secretary General, Prof. E. de Grosz; Treasurer, Prof. J. de Elischer; Joint Sec. General, Dr. L. Vermes; Secretaries, Dr. I. Bassa, Dr. L. de Lieberman, Jnr., all of Budapest. The neurological and psychiatric sections will be presided over respectively by: President, Prof. E. Moravcsik; Secretary Dr. C. Hudovernig.

SHOCK AND VASO-MOTOR RELATIONS.—W. D. Porter, M. D., Professor of Comparative Physiology, Harvard University in the Harvey lecture on "Vaso-Motor Relations," after a trauma and other experiments on animals with his colleague, Dr. H. F. Pratt, to determine the individual action of peripheral areas, etc., and after stating that the material at hand does not justify any theory of the mechanism of shock, reminds us that the vaso-motor nervous system seldom, if ever, dilates or constricts all the vessels at one time. The same afferent impulse will cause the vaso-motor center to dilate the vessels of the face while it constricts those of the abdomen. The effect upon the general blood pressure depends upon the relative size of the dilating and constricting areas. Here the splanchnic nerves, which govern the vessels in the abdomen, have great importance. Shock must therefore be studied from a local as well as a general standpoint.

The necessity of studying the parts, as well as the whole, will be more apparent when the reader remembers that the vasomotor system is composed of three separate neurons,—one in the bulb, a second in the spinal cord, and a third

outside the cerebrospinal axis. Experiments undertaken by the writer and Dr. Clark show that the several neurons are essentially individual in their action. Were they all of one order, they would react equally to the same stimulus. In other words, the sciatic reflex and the depressor reflex should both be increased or both be diminished by the action of the same agent. We find, however, that they are affected in different ways by the same drug. Curare, for example, affects the depressor reflex in one way and the sciatic reflex in another. The experiments seem to establish a specific difference between the bulbar and the spinal motor cells. Support is given this belief by the percentile curves published by the writer on page 404, vol. 20, of the *American Journal of Physiology*.

The author thinks a clear distinction should be made between the symptoms of shock and shock itself. The symptoms of shock form a clinical entity about which there can be little dispute; shock, on the contrary, is a pathological state, the data of which are at present hypothetical.

The hypothesis which constitutes the hitherto generally accepted definition of shock declares that the vaso-motor cells are depressed, exhausted or inhibited by excessive stimulation of afferent nerves. The fall in blood pressure and the accompanying symptoms are declared to be the result of this depression. The experiments cited above demonstrate that the vasomotor cells are not thus depressed or inhibited and that the excessive stimulation of afferent nerves does not materially lessen the blood pressure. The present hypothetical basis of shock is thus removed. The thoughtful reader will hardly quarrel with this conclusion; he will remember that there is as yet no proof that either the respiration or the temperature can long be altered by afferent impulses.

The literature of this important subject is marred by much loose thinking. There is no conclusive evidence that any of the cases recorded as shock are justly so classed. A symptom-complex exists beyond question, but it would be hard to deny that the changes in the heart-beat and temperature as well as the apparent alteration in the nervous sys-

tem are not produced by the low blood pressure.

He then proceeds to briefly examine certain sources of error.

Many clinicians would have us believe, he says, that every case in which the blood pressure falls far below normal is shock. But this fall can readily be brought about without any injury to or pathological change in the central nervous system. Exposure of the intestines is a frequent means of bringing about so-called shock. Now exposure of the intestines inevitably dilates the largest vascular area in the body. The general blood pressure thereupon necessarily falls. Primarily, this is not shock at all, but simply an hydrostatic phenomenon, identical with the fall in arterial pressure produced in a rubber and glass model of the circulation by reducing the peripheral resistance. It may indeed be very dangerous,—a rabbit may be bled to death in its own portal system by dividing both splanchnic nerves—but the cause of death is anemia of the bulbar cells; a local anemia. The removal of large portions of the skin acts also primarily in this hydrostatic way by dilatation of extensive vascular areas.

A fall in blood pressure which is really due to inhibition of the heart is often attributed to a reflex lowering of the blood pressure through the action of afferent impulses on the vasomotor centers. In the human subject it is usually impossible to determine with certainty whether the alteration in the heart beat is primary or is secondary to abnormally low blood pressure.

THE FIFTH PAN-AMERICAN MEDICAL CONGRESS will be held in Guatemala, Central America, the second week in August, 1908. The trip from New Orleans or from New York by steamer to Porto Barrios is an agreeable one. The arrangements for the trip will be in the hands of the chairman of the committee on transportation. There will be no charges for transportation within the Republic of Guatemala. Further information can be obtained from Dr. Ramon Guiteras, Secretary, 75 West Fifty-fifth street, New York.

A MEMORIAL TO BROUARDEL.—France will erect a monument to C. H. Brouardel, one of the most prominent men in

forensic medicine and public hygiene, of the last quarter of a century. His *Annales d'hygiène publique et de médecine légale*, and Professorship of Legal Medicine in the University of Paris, with his personal contributions to anthropological and therapeutic science, made the world his debtor and gave him cosmopolitan fame.

"EXPERT TESTIMONY says while we know that the public strictures are not always merited, yet numerous cases, no doubt, deserve the condemnation they have received. That the fee regulates the opinion we do not for a moment believe where applied to the great body of medical men."

The *Denver Medical Times* and *Utah Medical Journal* believe that:

"So long as one side or the other employs the expert, his feelings will be more or less influenced by that fact, unless he has sufficient force of character to forget his employer. As the expert is called to testify to facts or opinions that are beyond the reach of the general practitioner, and along lines that he has made special preparation for, let him be chosen by the court and his remuneration fixed by the same. The attorney for one side or the other never fails to bring out the fact that the medical man is employed and paid by the opposing party. This fact is paraded before the jury in more or less flowery language, and if the same expert has appeared for the party on former occasions that fact is "mentioned."

We believe it is the desire of the court and jury to get at the facts in each case, and if we can appear in a light free from bias, so much the better for all concerned. Of course we are familiar with the saying that "the attorneys can buy any kind of opinion," and as long as this is true in a minority of cases, the majority will suffer from unjust criticism.

But we do not believe any real expert who must be truthful and consistent to avoid censure of conscience, risk of reputation and perjury indictment, will suffer himself to give a biased opinion evidence. Little, reckless, unconscionable, impecunious notoriety seekers might.

"If counsel on either side wish the services of experts in the preparation of the case or the examination of witnesses, it

should be simply a matter of agreement between the parties. Such expert might testify as opinion witness or act in the capacity of assistant attorney.

An evil which ought to be done away with is the "posing" as experts without sufficient medical knowledge to justify. In this we concur.

This journal is informed that recent legislation in Massachusetts provides for an expert appointed by the court who is placed on the stand after the experts of both sides have testified, and his duties not only embrace the giving of an unbiased opinion, but pointing out the fallacies of the other experts. This is certainly a step in the right direction, and we trust this State will soon make a similar step.

WHERE A PHYSICIAN CAN NOT PUT OUT HIS SIGN NOR TREAT CASES REGULARLY.—He may treat only emergency cases at home in a certain neighborhood. It is not generally known that a doctor must be careful when he puts out his sign. However the St. Louis Court of Appeals lately modified the injunction restraining Doctor Henry Schwarz from maintaining an office or treating patients at Westminster Place and Newstead Avenue. The case arose over restrictions against conducting any business in the district.

The Circuit Court issued a perpetual injunction, restraining the doctor from practicing his profession at his residence in any way. The Appellate Court makes the injunction operative only until 1917, when the restrictions expire, and suggests that the physician should not be required to refrain from treating emergency cases.

Judge Bland, who wrote the opinion, says it would be ridiculous and inhuman to hold that no patients should be attended at his residence. Doctor Schwarz should discourage persons from calling, the opinion recites, and he cannot set apart hours for treating patients at his residence. But if he administers to a person who calls to be relieved from suffering instead of ordering the patient away, he should not be charged with keeping an office in violation of the restrictions. Associate Judges Goode and Norton concurred in the decision.

The injunction was issued at the request of property own-

ers adjacent to Doctor Schwarz's residence.

The practice of medicine is regarded by certain people and by courts as a business and not as a profession for human relief and as a very objectionable business in certain neighborhoods, notwithstanding the often immediate imperative needs of the doctor in many family emergencies and the necessity of having a family physician in close proximity to family residences. Why not rule out school houses, kindergartens, churches, etc., from these neighborhoods.

The doctor is as necessary an appurtenance to a well arranged residence neighborhood as the barber, the baker, the butcher or the bath house, bowling alley or buffet around the corner, even though he declines to be classed or located with them. It would be ill for residence neighborhoods if they generally should drive out the doctor, divine and the school-master from intimate relationship with them in daily life and this St. Louis residence district and its court record suggests that a more intimate relationship with all three might prove salutary to all concerned.

FEEDING SCHOOL CHILDREN at public expense has lately been under consideration of the *London Council*, the *London Practitioner* and the *Journal of the A. M. A.* The usual pauperizing aspect of the case has been presented but there can be no reasonable objection to the hot rolls and milk for all children who may want them on reaching school each morning and at full half hour noon recess. Besides the incentive to punctuality at the hour of the morning attendance on the part of the poor scholars, the building of the better brain for the reception of instructive study would thus be promoted. The elimination of the backward, tired and indifferent child would also be accomplished in some by combined brain and body food. The mind's capacity, inherent aptitude being equal, depends on the nutrition and force of the body and brain. The building of good brains during the evolution toward maturity and filling them with right knowledge of fact, morals, government and working power is essential to future personal, social and political stability.

The children today are our units of strength and stability

tomorrow, strong, steady, right working brains are good investments for any people. They are worth the price of their building, feeding and training.

DR. WM. W. IRELAND, our much esteemed friend and collaborator and well known to our readers, whom the Editor of the *Alienist and Neurologist* was gratified to meet at the late Amsterdam Congress, was the recipient, besides the many congratulations of his old friends, of a very justly complimentary full column notice in *L'encyclopadie Contemporainer*.

After paying a high compliment also to the great progress in psychiatry and neurology and to the merits of the savants in general who were in attendance at this important convocation, the *Encyclopedia* gave the biography of the author's life and work, including his birth and school days at Edinburgh, his early medical practice years, his life in the service of his country and its battles in India, at the Siege of Delhi and the history thereof to his contributions to the *Edinburgh Medical Journal* and the *Journal of Mental Science*. We should like to reproduce the entire article in detail but space forbids.

We wish our long time friend and colleague a long and happy career.

THE PROMOTION OF ABLE MINDS AND BRAINS is within the scope of the ALIENIST AND NEUROLOGIST and as such it is pleased to read such utterances in the daily press as the following in the *St. Louis Times*:

"The Bradley acquittal is another triumph for the unwritten law—which is not law, but the uprooting of law. It is a victory for emotion and sentimentality against the statutes society has framed for its own safeguarding. It is invitation to the reckless to become the executors of their own wild notions of justice, and an assault upon the accepted sanctity of human life.

"Influences incalculably corrupting to morals are cast abroad to net youth and purity through the publicity given to such hideously shameful tales as the times recently have listened to in the Thaw case, the Strother case, the Bradley case.

"The indecent spectacle of women struggling for front seats lest they miss a single indecent syllable of evidence at these varee-shows in court has been presented frequently of late, to the nausea of the well-minded."

WHILE A DECENT BILLBOARD may be ornamental and instructive and better to view than a dirty, raggedly fenced vacant lot, the lasciviously suggestive, crime-inspiring pictures on them hurt the mind and moral health, and should be put out of use by law.

THE XVI. INTERNATIONAL MEDICAL CONGRESS is to be held at Budapest, August 29 to September 4, 1909. Savants and leading lights of the Medical profession in all countries have promised co-operation. The Hon. Sec. Gen'l. Professor Emil Grosz, M. D., cordially solicits his colleagues throughout the world to join in this scientific work of this important Congress.

ON BLOOD COUNTS AND TOXHEMIAS IN THE INSANITIES OF AMERICAN HOSPITALS.—Dr. W. F. Kuhn, Superintendent of the State Hospital number two at St. Joseph, has been making a study of toxhemia in Insanity (*Jour. A. M. A.*) and makes an interesting record of his findings as to blood counts in katatonia. He thinks also toxhemia as a cause of primary dementia or dementia praecox is a fairly well established fact and that examination of the blood seems to justify the conclusion that profound metabolic toxhemia causes mania and melancholia agitata. These states, traumatism and the hereditary morbid aptitude of the psychic neurone undoubtedly have much to do with the causation of insanity and suggest the importance of regular and systematic examinations and records of blood states with a view of ascertaining toxhemic and blood count showings in every case as a part of the asylum.

A PIONEER SURGEON.—Dr. Antoine Francois Saugraine settled in St. Louis in 1800 and was the first surgeon to practice regularly west of the Mississippi River. He is credited with being one of the first to make lucifer matches in this country and the Lucifer matches which have been unmade by the St. Louis

courts since the time of Surgeon Saugraine, have been numerous enough to maintain a matrimonial misfit factory all the years since.

THE DOCTOR AND THE PROPRIETARY SAMPLES.—If the shade of Harrison Ainsworth, the author of *Old St. Paul's* and fiction historian of the Great London plague and fire should visit the offices of the physicians to-day, he would see a replica of Ainsworth's interesting character "Blaise tasting the patent medicines" in the doctor sampling proprietaries as they fill the reception room tables of modern physicians.

And they are not placed there "by your leave," but by the "nervy" assurance of the distributors making the doctor's ante rooms advertising media for the good, bad and indifferent. We like to see these amiable gentlemen of the pharmaceutical laboratories when they come with elegant approved or approvable therapeutic goods, but would like to decide which we should display, if any, to our waiting patients in the reception room. The practice of medicine and the selection of proprietary products for dispensing is the legitimate province of the physician.

Come with your goods when we are in, gentlemen, or turn their labels and dosage to the wall on our mantel till we have decided on what to do with them, please. Then we shall applaud your modesty and perhaps the merits of your goods. And the same with your literature, please. Elegant proprietaries of non secret composition are welcome to our office, but we must first decide which shall go to the patient.

THE MEDICAL PROFESSION is pretty wide awake, and it is not nearly so necessary that it should awaken, as that the public itself should awaken to its needs and privileges. It is a very stubborn creature—this public. It is in the habit of viewing the medical man who in a spirit of the truest altruism seeks to lessen sickness, as having an axe of his own to grind.—*Medical Sentinel*.

THE ASSOCIATION OF AMERICAN TEACHERS OF THE DISEASES OF CHILDREN will hold its annual meeting in Chicago at the Great Northern Hotel, corner of Jackson Boulevard and Dearborn, on June 1st.

This association is somewhat unique. To be eligible one must be a regular physician resident in the United States, Canada or Mexico, in good professional standing and membership in his county or local medical society and actively engaged as Professor or Associate Professor or Clinical Professor of Pediatrics, or as adjunct to such a chair, or who holds the position of lecturer on this branch or an equivalent position in a recognized medical college, or who is a member of a properly organized hospital or dispensary staff actively engaged in the treatment of children.

THE USE OF THE NATIONAL FORESTS is an interesting and instructive little red bound, illustrated brochure prepared by Clifford Pinchot and sent out by the national department of agriculture to inform the people of the timely timber saving methods adopted by the government of the United States on the Government woodlands, the uses to which these lands are put or permitted to be put, the people employed in their guarding, preservation, etc. The laws governing the subject, the location and area of the lands, date of proclamation, conditions of settlement thereon, etc. This is a great conservation move, long delayed, yet not too late for rescue of the American timber resources. The government should now fully awaken from its lethargy to its duty to the people in regard to its neglected rivers and the too meagre attention given up to this date.

THE PURE FOOD LAW is the first step, a little too tyrannical and unwisely taken in some of that departments rulings. But securing clean germ-free bread, meat and milk, sanitary streets, street cars and public places of assembly in Washington City and the District of Columbia and on interstate railway lines, is setting a good popular welfare example for the states to emulate.

THE INTERNATIONAL TUBERCULOSIS CONGRESS, soon to meet in Washington, will enlighten congress on an important sanitary matter quite as great for the welfare of the public as the pure food law and a part of the latter.

Oikology is given too little attention by home designers and home builders in its sanitary aspects, for city dwellings

with regard to light and sun exposure, ventilation without draught, wall and floor purification and freedom from dust entrance and accumulations. Pure water is too often overlooked as an absolute health essential in the up to date home.

IN MEMORIAM.

DR. JOHN ORDRONAU, the first Commissioner in Lunacy for New York, serving from 1873 to 1882, prominent also during the civil war as a medical officer of high rank, and as a medical author of recognized merit in medicine, professor of medical jurisprudence in Dartmouth Medical School and psychological medico-legal expert, died January 20, at Glenhead, New York, of cerebral hemorrhage at the age of seventy-seven.

NICOLAS VASCHIDE, who died October 13, 1907, at his home, in Paris, after having attained for his years a wide scientific reputation as a laboratory and clinical psychologist is memorialized in the *Journal of Mental Pathology* by the following record of his indefatigable and enthusiastic labor.

N. Vaschide and H. Pieron.—The Symptomatic Value of Dreams, *Journal of Mental Pathology*, Vol. I, No. 2.

N. Vaschide and Vurpas.—On the Mental Analysis, *Journal of Mental Pathology*, Vol. II, No. 2.

N. Vaschide and Meunier.—On the Cutaneous Temperature in the General Paralytics, *Journal of Mental Pathology*, Vol. III, Nos. 2-3.

N. Vaschide and Meunier.—Contribution to the Study of Mental Impulses, *Journal of Mental Pathology*, Vol. V, Nos. 4-5.

N. Vaschide and M. Lahy.—La technique de la mesure de la pression sanguine particulièrement chez l'homme, *Arch. Generales de Medecine*, Vol. VIII, 1902.

N. Vaschide and M. Lahy.—La technique sphygmographique, *Revue de Medecine*, 1904.

N. Vaschide, Pieron and Toulouse.—Technique de Psychologie experimentale, Doin, Paris, 1904.

OBITUARY.

CULLEN ANDREWS BATTLE.—On the eve of his departure for his Michigan farm, where he had anticipated a season of rest and a little yachting to restore failing health, Cullen Andrews Battle, president of Battle & Co. Chemists' Corporation, St. Louis, died suddenly in his apartments at Hotel Jefferson at 6:55 a. m. Sunday, March 22. Internal hemorrhage caused his prolonged illness and death.

He was a worthy citizen and an upright, honorable man in all business, social and personal relations. His well known firm was best known to the medical profession through Bro-



CULLEN ANDREWS BATTLE.

midia, a definite, serviceable nonsecret combination for certain indications when professionally administered, and it could be so because the precise formula was published to the profession from the beginning.

Mr. Battle was a son of the Reverend Doctor Amos Johnson and Margaret Parker Battle. He was born in Hartford County, North Carolina, May 8, 1848, and educated at the Wilson Collegiate Institute at Wilson, N. C.

He had been in business, associated with his brother, as a manufacturing chemist in St. Louis since October, 1875. Mr. Jesse M. Battle survives.

N. Vaschide and Vurpas.—La logique morbide; preface by Ribot, Rudeval, Paris, 1902.

N. Vaschide and Vurpas.—Essai sur la psychologie des monstres humains. Un anencéphale. Un xiphopage, Rudeval, 1902, Paris.

N. Vaschide and Vurpas.—Recherches expérimentales sur la psychologie du sommeil, *Academie des Sciences*, March 23, 1903, Paris.

N. Vaschide and Vurpas.—Le rythme vital, *Academie des Sc.*, Nov. 3, 1902.

N. Vaschide and Piéron.—La psychologie du rêve au point de vue médicale, Masson, Paris, 1902.

N. Vaschide and Raymond Meunier.—La memoire du rêve et la memoire dans les rêves, *Revue, de philosophie*, Oct.-Dec., 1906.

N. Vaschide and Raymond Meunier.—Des caractères essentiels de l'image onirique, *Annales des Sc. psychiques*, October, 1903.

N. Vaschide and Cl. Vurpas.—Contribution expérimentale a la physiologie de la mort, *Academie des Sc.*, April 14, 1903.

N. Vaschide.—Recherches expérimentales sur les hallucinations télépathiques, *Bull. Soc. Sc. de Bucarest*, XI, Nos. 5, 6.

N. Vaschide.—Taste,—in *Dictionnaire de Physiologie*, Charles Richet.

N. Vaschide.—Essai sur la psychologie de la mort. (edited on his death bed and submitted to the printers).

N. Vaschide and Raymond Meunier.—Essai sur la psychologie de l'attention.

SELECTIONS.

CLINICAL NEUROLOGY.

TUMOR OF THE PONS.—Dr. D'Urso (*Arch. ed Atti della Soc. Ital. di Chir.*, XVIII, 1906). A boy nine years of age, three months before his admission to the hospital began to suffer from vertigo followed by headache, and became unable to hold his head up, carrying it slightly forward and to the left. Next, vomiting and a cerebellar gait appeared, There was diminution of sight and hearing on the left side. Percussion of the skull was especially painful on the right side posteriorly; convergent strabismus; adduction and abduction eye movements were inhibited; right palpebral slit somewhat smaller than left. There slight left-sided facial paralysis and slight deviation of the tongue to the left. Some dysphagia, but no disturbance of speech. Slight motor weakness of legs, more marked on the left side. Reflexes were generally exaggerated, only the abdominal and cremasteric being absent. Pupils reacted very sluggishly.

The diagnosis was tumor of the cerebellum or the pons. The latter was assumed to be more probable. Certain features seeming to indicate a right sided location of the neoplasm, craniectomy was performed on the right side posteriorly. The outcome was negative. The dura and surface of the brain there were normal. Nothing pathological was found by puncture, incision or palpation of the cerebellum aside from signs of brain pressure. The posterior cranial fossa was opened on the left side also, with the same negative findings, one month after the first operation. The patient died under progressive symptoms of brain pressure. The autopsy showed marked dilatation of the fourth ventricle and a diffuse gliosarcoma of the pons, especially toward the right side. F. R.'s *Extract condensed from Med. Rev. of Rev's.*

PELLAGRA WITH INSANITY IN SOUTH CAROLINA.—The February eighth *Journal A. M. A.* notes that the report of Dr. Searcy of the discovery of pellagra in the Mount Vernon Insane Asylum, in Alabama, is now supplemented by a similar report by the medical officers of the State Hospital for the Insane at Columbia, S. C., with detailed clinical histories of a number of cases there observed. They conclude that a disease of this type occurs in that state and that the characteristic form of mental disorder it produces is also observed. Since it is estimated that in southern Europe only about 10 per cent of the victims of the disease present these mental symptoms the occurrence of a number of cases in the asylum would indicate the existence of a much larger number in the general community. It is somewhat remarkable that, considering the large part taken by maize in the diet of the inhabitants of large sections of this country, the disorder has not been recognized before. The most natural way to account for it, perhaps, is to assume that the particular form of bacterial or fungoid infection is a comparatively recent arrival from southern Europe, Mexico or Central America. In every case in which it has been noticed, it appears to have been connected with the ingestion of damaged corn meal. The fact that hookworm disease, now known to be endemic in large sections of the Gulf states, was a comparatively recent discovery in that region, suggests an unpleasant possibility that pellagra may be found more prevalent than has yet been demonstrated. The coincidence of the two disorders in some of the South Carolina cases is of interest, and, as the report says, calls for further inquiry.—*Jour. A. M. A.*

FORENSIC PSYCHIATRY.

INSANE DELUSIONS, EXPERT EVIDENCE AND TESTAMENTARY CAPACITY.—The supreme court of Illinois says, in the case of *Owen vs. Crumbaugh*, that a person who believes supposed facts, which have no existence except in his perverted imagination, and which are against all evidence and proba-

bility and conducts himself, however logically, on the assumption of their existence is, so far as they are concerned, under an insane delusion. Whatever form of words is chosen to express the legal meaning of an insane delusion, is it clear, under all of the authorities, that it must be such an aberration as indicates an unsound or deranged condition of the mental faculties, as distinguished from mere belief in the existence or non-existence of certain supposed facts or phenomena based on some sort of evidence. A belief which results from a process of reasoning from evidence, however imperfect the process may be or illogical the conclusion, is not an insane delusion. An insane delusion is not established when the court is able to understand how a person situated as the one in question was, might have believed all that the evidence shows that he did believe and still have been in full possession of his senses. The existence of insane delusions on one subject is not incompatible with sanity on all other subjects.

Furthermore the court holds that where the proof shows facts which prove, beyond all doubt, that a testator was in the full possession and proper exercise of all of his mental faculties, an opinion of an expert, based on a hypothetical state of facts not inconsistent with legal insanity, can have little or no weight, and in the absence of any other evidence of insanity will not warrant the court in refusing to direct a verdict notwithstanding such opinions.

It is also declared that it could not be said with any show of reason that the varicose veins of a person's leg, causing it to become black from the knee to the foot, or the further fact that he was troubled with heart disease, had the remotest effect on his capacity to make a will. Equally unimportant and irrelevant were the supposed facts that until three years before the making of the will he had been opposed to spiritualism, and that afterwards he cared chiefly for the society of spiritualists.—*Ex. Jour. A. M. A.*

NEUROPHYSIOLOGY.

THE CORTICAL CENTER FOR HEARING.—Recently, Flechsig has thrown considerable light on the subject and has brought

strong evidence to show that though the auditory center is undoubtedly in the temporal lobe, its localization in the upper temporal gyrus is only partly accurate. The main auditory center, according to Flechsig, is in a part of the temporal lobe which is invisible when the brain is looked at in the ordinary way. The true cortical center for hearing is in the anterior transverse temporal gyrus (sometimes called Heschl's convolution) on the upper or Sylvian surface of the temporal lobe, forming part of the operculum, continuous with the cortex of the Island of Reil. Heschl's convolution can only be seen by separating the walls of the Sylvian fissure. It is continuous with the upper temporal gyrus, which was formerly considered as the main auditory center.

Flechsig bases his statements partly upon the results of the study of myelinisation of fibres in human embryos of various ages, and partly on the secondary degenerations which follow destructive lesions of Heschl's convolution. The projection fibres leading from the anterior transverse temporal gyrus into the sub-lenticular region of the internal capsule form a distinctive bundle, which may be regarded as the "auditory radiation," analogous to the "visual radiation" in the occipital lobe. The fibres of this auditory radiation are connected mainly with Heschl's convolution and only extend to a slight extent on to the convex surface of the brain towards the first temporal gyrus. If Flechsig's views are correct, and there seems no sound reason for rejecting them, we must regard Heschl's convolution as the true auditory convolution. It is interesting to note that in right handed people this gyrus is larger and better developed on the left side of the brain than on the right; in fact, as a rule on the left side there is only one definite gyrus, the anterior, whilst on the right side there are both an anterior and a posterior transverse gyrus.—*By Purves Stewart, M. D., F. R. C. P., in The Hospital.*

PHYSIOLOGISTS were not slow to recognize in the *x*-rays a new means of research on the digestive processes and movements of the stomach and intestine, and our knowledge in this direction has been materially advanced by Cannon, and later by Rieder and Holzkecht, by their skiagraphic observations on animals and on man.

Quite recently these observations have been confirmed and extended by Dr. A. F. Hertz at Guy's Hospital, and by combining skiagraphy with auscultation and percussion he has been able to give a very useful account of the course of the food through the alimentary canal. The food is made visible by means of the *x*-rays by mixing a meal with an ounce or more of bismuth carbonate. In this way it has been demonstrated that the stomach is functionally quite definitely divided into two parts—the fundus, or upper third, which acts as a sort of storehouse and shows little or no digestive activity, and the antrum pylori, which receives the food in doles and is subject to constant peristalsis from the commencement of a meal. When empty the fundus contains gas, but the rest of the stomach is collapsed. It appears from these observations that in the recumbent position food does not pass from the fundus to the collapsed pyloric part of the stomach till sufficient has been received to overcome the resistance due to the cohesion of the stomach walls, and it is suggested that the feeds often given to patients in bed may be too small to effect this, and consequently remain in the fundus undigested till a further feed is administered. The indication would be to give larger feeds at longer intervals. One must not, however, be too hasty to apply physiological deductions to bedside treatment. On other grounds, probably in the majority of cases, frequent small feeds are found most suitable.

A bismuth feed takes on an average about four hours to pass through the small intestine to the cæcum. About two hours are required to traverse the ascending colon, and the same time to pass the transverse colon to the splenic flexure. The subsequent course is more sluggish, and depends a good deal upon the previous contents of the lower bowels and the time of defæcation. Dr. Hertz used this method of investigation to examine cases of chronic constipation in order to ascertain what part of the bowel is responsible for the condition in any particular case. In two cases he found that the passage of food was normal as far as the transverse colon, and that the constipation was due to atony of the sigmoid and rectum, and in these cases daily enemata have relieved the condition. In other cases he has been able to locate the sluggish passage of

food in the transverse colon, and in these cases he has obtained better relief by drugs, such as magnesium sulphate and liquor strychniæ. As Dr. Hertz suggests, this method opens up a wide field for research. Not only may it elucidate the pathology of constipation in the various conditions, neurasthenia, dyspepsia, chlorosis, with which it is associated, but it may also be possible by these means to discover the exact effect of the various drugs and other measures employed in the treatment of constipation, so that each case may be provided with a suitable treatment.

DACTYLOSCOPY SUPERSEDED AS A METHOD OF DETECTING CRIMINALS.—Paul Prager, of Vienna, finds dactyloscopy unreliable as a means of detecting criminals. This unreliability is due to the possibility of change by injuries leaving scar tissue and by acids so as to render identification impossible. He has found the impressions of the upper and lower jaws a more certain means of identification. No two jaws are alike in the number, length and breadth of the teeth, curvature and radius of the maxillary arch, the height, breadth and depth of the upper jaw. To these may be added possible gaps in the rows of teeth and the form of the palatine membrane. Prager has taken many impressions and found no two alike. Such impressions would allow of identification after mining accidents, burning and drowning.

DEMENTIA AMERICANA OR PLUTOCRATICA.—Dr. E. S. McKee, of Cincinnati, quotes Dr. Arnold Lorand, of Carlsbad, Austria, in a recent visit to America, as saying: Lack of systematic training in obedience is one of the main agencies in crime. American youths suffer for the training to obedience which goes with service in the army. In striking contrast to the willful millionaire youths of America are such men as Benjamin Franklin or Abraham Lincoln. The making of nonsensical laws which no one thinks it a crime to break is harmful, for after the breaking of one law it is all the easier to think it is no harm to break another. Children and weak-minded persons are like monkeys, great imitators, and should not be allowed to see questionable cinematograph shows. In France, out of 173 per-

sons who had been beheaded, only two had not seen an execution. Dr. Lorand thought that the reason that criminality is greater in the United States than abroad, is because her sons are not disciplined by regular service in the army. The omission of home and school training in the golden rule proprieties, the moral and psychological neglect of the street gamin, the noisy, obtrusive street car newsboy and street corner and theatre gallery urchin is America's unmonitored kindergarten school of future criminality.

Children forced to respect and obey the moral and social proprieties while developing towards maturity seldom require in after life the correction of the law. They grow up self-restrainable and self-restrained with healthy psychic inhibition accustomed by habit of oft repetition. To respect and obey becomes an automatic or acquiescent mental habit requiring neither police nor courts nor laws to regulate the rightly trained in youth. "Train up a child in the way he should go and when he is old he will not depart from it" is as true now in this advanced psychological age as when it was first said thousands of years ago. But though more is known of the way to train children, too little is done.

NEURODIAGNOSIS.

OPTIC NEURITIS IN INTRACRANIAL TUMOUR.—Out of 50 cases the neuritis in 19 was more intense in the eye on the side of the lesion; in 11 it was more marked in the opposite eye; in 13 it was equal on the two sides, or there was no note to say there was any difference; and in seven cases there was no neuritis.—*Dr. Leonard Guthrie.*

NEUROANATOMY.

THE MEDICAL TIMES QUOTES Dr. Spitzka, in his treatise on human brains, just issued by the American Philosophical Society in Philadelphia, as declaring that it is the white matter of the corpus callosum which unites the cerebral hemispheres, and the fibres of which radiate so extensively, that determines

the quality, the fineness and the usefulness of the brain. The last of these distinctions no one will doubt; for if the fibres of the callosum are degenerate, cerebral disease will be manifested whether or no the cortical cells be normal. Dr. Spitzka declares that idiocy and mental insufficiency have their seat in the disease, traumatism or imperfect development of the corpus callosum. He finds the brain of totally unskilled men to be lightest; those of mechanics, clerks, business men and teachers are slightly heavier. The greatest brain weights are among "the geniuses of the pencil, brush and sculptor's chisel, the mathematicians, scholars and statesmen." It seems that the configuration of the brain is determined according to the work it does, special types being produced in abstract thinkers, experimenters and artists. The civilized peoples have a slight increase in brain bulk over savage races; but this does not nearly account for the mental disparities. These are better explained in Dr. Spitzka's researches which show differences in structure and adaptation of parts.

NEWSPAPER NEUROLOGY.

DES MOINES, IA., Jan. 25.—Charles Matthews, a well known resident of East Des Moines, underwent an unusual operation at the Mercy Hospital to-day. For years he has suffered at times with intractable neuralgia and the doctors in charge propose to remove the inferior maxillary nerve, thus removing the cause. *The nerve, like the appendix, has no especial value.*

NEUROPATHOLOGY.

FATAL ANEMIA.—Rowley discusses with great detail the occurrence of extensive phagocytosis of red blood corpuscles and leucocytes by leucocytes in the peripheral blood in a case of anemia in a young man 27 years old who had aortic and mitral disease. Every type of leucocyte was engaged in phagocytosis of fellow cells. On the warm stage the phagocytes

were readily seen to send out processes that would reach around the corpuscles which evidently were incorporated into the body of the phagocyte. There was also as stated phagocytosis of leucocytes. The destruction of the cells taken up could be followed and seemed to result on the one hand from processes of solution, due probably to some enzyme, and on the other hand to be due to a large extent to mechanical breaking up of the captured cells. The phagocytosis observed in this case is attributed to the presence in the blood of autohemopsonins.—W. W. Rowley, *Boston Jour. Ex-Med.*, Lancaster, Pa.

BLOOD PRESSURE IN ELECTRIC EPILEPSY.—1. Electric epilepsy is produced by a direct electric current interrupted 110 times per second and passing one-tenth of the entire period, as is explained in my Paris thesis, 1906, "Sommeil électrique, épilepsie électrique et électrocution."

2. Electric epilepsy is induced by passing the above mentioned current through an animal's body during a period of four seconds. The cathode is fixed at the head and the anode at the lower part of the spine. For a rabbit the required potential is 55 volts; for a dog—110 volts.

3. The tonic phase of the epileptic attack begins as soon as the current begins to course through the animal's body.

4. The blood pressure begins to increase a few seconds after the closing of the circuit; it is perhaps more correct to say that the increase of the blood pressure is noticed immediately after the opening of the circuit. The blood pressure increases progressively and reaches its maximum when the *clonic* convulsions are at their maximum. Then, as the *clonic* convulsions decline, the blood pressure decreases accordingly, falling gradually to the normal level with the final disappearance of the *clonic* convulsions.

CEREBRAL BLOOD PRESSURE.—The brain of a dog is exposed by trephining its skull (during electric anesthesia: see my paper on "Electric Anesthesia: Its Use in Laboratory Work," *Journal of Mental Pathology*, Vol. VIII., No. 3, 1907),

and the epileptic attack is induced as is explained in my thesis cited above.

1. During the period of the passage of the current (four seconds) the brain seemed to me to grow considerably paler than normal (one of two colleagues who were present at this operation did not consider this pallor sufficiently marked to warrant affirmative opinions on the subject).

2. After the opening of the circuit and during the continuation of the *tonic* phase of the attack the cerebral matter becomes progressively pink in color; the cerebral vessels become visibly dilated as the *clonic* convulsions take place, and this dilatation causes the vessels to reach twice or three times their normal size at the moment when the *clonic* convulsions are at their maximum.

CONDITION OF THE CEREBRAL MASS DURING AN ATTACK OF ELECTRIC EPILEPSY.—1. The cerebral mass exposed by trephining begins to increase in volume as soon as the cerebral blood vessels begin to increase in volume—after the breaking of the circuit. And the cerebral mass continues to increase progressively in volume in proportion to the increase of the blood pressure—while the tonic and the clonic convulsions are being manifested. The exposed cerebral mass finally increases to such an extent that it protrudes from the cranial opening in the shape of a hernia; the maximum size of this hernia corresponds to the maximum intensity of the *clonic* convulsions.

2. The cerebral hernia begins to decrease in volume with the decrease of the intensity of the *clonic* convulsions, and the cerebral hernia returns to its normal position within the cranial cavity when the *clonic* convulsions cease.

3. The general blood pressure in electric epilepsy is presented by tracings published in my thesis cited above as well as in the tracings which I have the honor of presenting to you to-day.

4. The cerebral blood pressure during an attack of epilepsy was studied and published by Dr. V. Magnan, thirty years ago (*Lecons cliniques sur les maladies mentales, Paris*). His researches deal with epilepsy caused by absinthe. My experiments—on electric epilepsy in dogs—show similar results as regards the cerebral blood pressure.

I present my sincerest thanks to Dr. Rouxeau, Professor of Physiology, School of Medicine, Nantes, for his collaboration in this work.

Presented by Louise G. Robinovitch, B. es L., M. D., at the Congress of French Alienists and Neurologists, Geneva, August, 1907. International Congress of Psychiatry, Neurology and Psychology, Amsterdam, Holland, September, 1907.

JULY 15, 1907. —*Abstract from Jour. Ment. Path.*

APHASIA, SENSORY AND MOTOR.—Chafford gives a description of cases of both sensory and motor aphasia (*Journal des Praticiens*, February 23, 1907; *British Medical Journal Epitome*, January 18, 1908). What is indispensable to the production of an aphasia is a change in the region of Wernicke—that is, the zone of the angular gyrus and the first temporal convolution. Further, in motor aphasia there is often seen a lesion of the lenticular zone, usually of its external part. This latter can be alone affected (pure anarthria of Marie). In such a case the prognosis is good, and the patient can be again taught to speak. The patient suffering from sensory aphasia is able to see clearly but cannot read—word-blindness; he can hear but cannot understand words—word-deafness. He is 68 years old; has no signs of hemiplegia. At most there is a slight tremor of the upper limbs, especially the right. Sensibility is slightly diminished on the right side; his intelligence is badly affected. He hears his name but does not understand the meaning of the words spoken. He replies illogically, incompletely, frequently uses one word for another—paraphasia, or utters a series of syllables. He cannot tell the name of an object, but when he does speak—and these cases are often verbose—he articulates well, and utters, or rather allows to flow out, words utterly meaningless but well formed. There is no attempt to express his thought. That is the difference between the subjects of motor and sensory aphasia. The subject of sensory aphasia does not think, and for this reason, that thought is impossible without language inspired from the mind. One thinks one's words, said Bonald, before speaking one's thoughts. The subjects of sensory aphasia do not

think their words, consequently they do not find the need of expressing their thought. Their words do not answer to the outward expression of any mental conception. The patient in question had also lost his power of recalling musical sounds; he could not recognize popular airs. In the subjects of motor aphasia the memory of musical sounds is preserved, and these subjects can frequently sing without hesitation, though they cannot talk. The patient's writing is halting and badly formed; he can scarcely write his name; he cannot do the simplest calculation—the addition, for instance of a few simple figures. He cannot read, but he has retained the image of cards, and this is so with most subjects of aphasia. The author once set a subject of sensory and a subject of motor aphasia to play a game of écarté. The motor aphasic became impatient over the game, the sensory aphasic remained perfectly indifferent. Sensory aphasics may be mistaken for the subjects of mental confusion. The difficulty can be cleared up by asking the patient to read or to name a certain object. The prognosis is bad. An autopsy on the patient revealed softening of the angular gyrus, and also of the first and part of the second temporal convolution, with a further area of softening at the anterior end of the internal capsule. The subject of motor aphasia recently under care of the author was a man of 54, fat and high coloured. In March, 1906, he had a right-sided hemiplegia with loss of speech. His condition remained unchanged for ten months; he can neither write nor read, but knows the hours of the clock, can play cards, understands what is said to him, and all that is neither written or printed matter. He takes an interest in what is going on around him, but always seems angry with himself when he cannot express his thoughts. He has no sensory troubles, but is subject to epileptiform fits, which make the prognosis bad, for during them his arterial tension is increased, and he may at any time have a further hæmorrhage.—*Maritime News*.

ARTERIOSCLEROSIS.—Dunn discusses the etiology of this condition under the three heads of syphilis, hypertension and heredity. He considers the physiology of blood pressure, and enumerates among the factors leading to more or less continu-

ous hypertension strain, infectious diseases, nephritis, toxins (including tobacco, coffee, tea), gastrointestinal toxins, ptomaines (of meat, cheese, game, etc.), constitutional diseases (obesity, diabetes and gout), and heredity. He describes the symptomatology in reference to arteriosclerotic or senile atrophic kidney, cardiac decomposition due to arteriosclerosis, and intermittent claudication, of which the chief symptoms are intermittent pain, cramps, limping, weakness, lameness, stiffness, cold and numbness, paresthesias, paleness and cyanosis. He discusses this condition at some length.

ARTERIOSCLEROSIS AND NERVOUS SYMPTOMS.—Coulter points out that the etiology of the nervous aspect of arteriosclerosis is practically the same as that found in general arteriosclerosis. Those engaged in mental labor or inclined to worry or who have inherited a neurotic temperament, are especially liable to an involvement of the arteries of the nervous centers. The nervous symptoms are referable either to the peripheral nerves, the cord of the brain (including mental alterations). Any group of arteries may be the principal seat, other vessels escaping for a time, which may result in the localization of the symptoms in one of these directions, the other regions apparently escaping. He points out that the anatomic disposition of the blood supply of the cord results in the anterior portion being more frequently affected than the posterior. Hence motor and trophic changes are more common than sensory. He discusses the cerebral symptoms at length and urges a guarded prognosis in all neurasthenic cases accompanied by any evidence of arteriosclerosis. He further insists on the use of a sphygmomanometer in place of relying on the touch.—*Western Medical Review, Omaha.*

NEUROTHERAPY.

THE TREATMENT OF DISEASE.—Geo. H. Butler, of Chicago, *Medical Record*, believes that we have come to attach too great importance to diagnosis and too little to the prevention and cure of disease, which are the physicians' highest

duties. It is rarely possible to destroy the cause of disease, but we can counterbalance the primary effects. We must treat the patient primarily. Symptomatic therapeutics cure a portion of the disease and prevent morbid phenomena, aggravations, and complications. By drugs we can give the blood its normal condition, and in the excretion of poisons, antagonize toxic matters, limit inflammations, increase secretion, produce sedative effects, and change vascular tension.—*Texas Med. News.*

RADIANT LIGHT IN NERVOUS DISEASES.—T. D. Crothers of Hartford, gives the results of ten years' use of the radiant light bath in the treatment of nervous diseases of the sclerotic type, fibrosis, local irritations, and inflammatory states of subacute nature. The radiant light bath is a powerful sudorific, acting much more rapidly than hot air. It also has some specific effect on the cells and tissues, is an eliminant, influences metabolism and nutrition, and its physical effects on the nervous system affect the mind and emotions. Sweating begins in a few minutes. Insomnia and exhilaration are followed by a deep and refreshing sleep. It overcomes nervousness and irritation in drug takers. It diminishes the desire to take spirits and drugs. Appetite is stimulated and digestion improved. Thirst, relaxation of the bowels, and renal activity are results that may occur. The action of bromides is increased by the bath. Mental relief and buoyancy of mind are remarkable. Despondency passes away and restfulness follows. Arterial tension is diminished.—*Medical Record.*

A HYPODERMIC INJECTION OF ATROPIN RELIEVES BRONCHIAL ASTHMA.—G. Zuelzer (*Die Therapie der Gegenwart*, September, 1906) recommends a hypodermic injection of one milligramme (gr. 1-64) of atropin to cut short the asthmatic paroxysm. By this means the emphysema and the resulting dyspnea are promptly relieved. The reason of this, according to this author, is as follows: The emphysema is due to irritation of the vagus, and atropin, as is well known, paralyzes the terminal filaments of that nerve. In support of his theory he adduces the fact that emphysema may be produced experimentally by electric stimulation of the vagus; if, however,

the animal has previously received atropin, no emphysema takes place. He also reports a case of "vagus neurosis," resembling an attack of asthma, except that there was complete absence of rales. Expiratory dyspnea, emphysema with tenderness of the right vagus, and slowing of the heart's action were present. An injection of atropin brought immediate relief.—*Can. Jour. Med. and Sur.*

PEACE WITH A SWORD.—It is marvelous that we can have great peace congresses and the great men of the Old World and the New can excite themselves in haranguing about matters over which they have no control, but which belong to the Governments, that represent the various peoples, while typhoid fever can almost decimate a neighboring city and threaten our own without any excitement being caused. Certainly there is an improper estimate of the relative importance of things, when the asphalt of the streets is left so as to endanger the horses' feet and the people whom they transport, and the streets are so dirty as to be a source of everlasting income to oculists and laryngologists, with typhoid fever raging all about our suburban borders and yet no general excitement is caused, while people are gathering by thousands to theorize and quarrel as to the day when men shall learn war no more. The Post-Graduate is heartily in favor of police and an army to bring Peace on the Earth. The greatest Authority for Peace, Himself stated that he did not come to bring Peace, but a sword. We shall need a sword for many a year to aid Governments to maintain cleanliness, order, justice and righteousness.—*Post Graduate.*

TREATMENT OF TETANUS BY SPINAL ANESTHESIA.—Dr. A. E. Russell reports (*Lancet*,) the successful treatment of tetanus by spinal anesthesia. Sixteen cc. of cerebro fluid were withdrawn and 3 cc. of the following solution injected: $1\frac{1}{2}$ grains of beta-eucaine, 1-3 grain of morphin sulphate and 3 grains of sodium chlorid, with sufficient water to make $3\frac{1}{2}$ ozs. This procedure was repeated four times.—*Journal of the Amer. Med. Assn.*

TEA AS A CAUSE OF CHILD BRAIN STUNT IN DORSET COUNTY, ENGLAND.—Abstract from Dr. P. W. Macdonald's

presidential address before the British Medico-Psychological Association, July, 1907.

The father, mother, son, daughter, and even the suckled infant, all share alike from the ordinary fare of black tea, bread and cheese, morning, noon, and night. This is no coloured picture, it is the simple truth. If the beverage tea were properly prepared, and not indulged in too freely, no harm would be likely to accrue; but what will be said of the ordinary laborer who consumes daily two to three quarts of black tea thus prepared? A brew is made between 5 and 6 a.m., and this same pot continues in use by being added to from time to time during the working day, until at last it is little else than rank poison. The fact that this tea is without either sugar or milk, being what is familiarly known in Dorset as "stark naked," makes things worse, and I am convinced is in many cases the cause of insanity among the laboring class. I am not decrying tea in its proper place, but the evils of tea drinking among the working classes have to be reckoned with in any attempt to probe deeply the causes of insanity. As a nation we consume six times as much tea per head as any other European country. This innutritious diet must lead to impaired nutrition of the nervous system, and as has been pointed out by the Irish Board of Lunacy, "when acting over many generations may have developed those neuropathic and psychopathic tendencies which are the precursors of insanity." Facts of this nature may lend colour for the demand for free breakfasts to certain classes of school-children, and whoever has visited the typical village or town school could not have failed to observe the number of dull, stunted and neurotic children. In the course of my inquiries I found as many as *15 per cent.* of non-educable children in village schools, and the percentage of dull and backward ran as high as *35 per cent.* Well might the author of *Physical Efficiency* say: "The towns will soon call in vain; for in place of being robust and healthy the children of the rural districts will often be found to be stunted and in a worse plight than the city children."

SPINAL ANESTHESIA.—Oelsner states that Sonnenburg has been using spinal anesthesia since 1904 and has now a

record of 875 cases in which it was applied. The analgesia did not appear in 54 cases, and slight to moderate collapse was observed in a number. The passage of flatus and stools under the influence of the spinal anesthesia was often of direct therapeutic value. This was observed especially in cases of incarcerated hernia after the intestine had been freed from the constriction, and also in cases of acute appendicitis with atony of the bowel. The contemplated operation was rendered unnecessary for two patients presenting symptoms of ileus by this by-effect of the injection. One fatality was observed, for which the method however, can not be held responsible. In many instances depression, nausea, vomiting and headache were observed as after general anesthesia, the headache lasting in a few cases for days and weeks. Severe collapse was observed in six cases, and one patient with ruptured tubal pregnancy succumbed in collapse after eight hours. Abducent paralysis occurred in 3 cases and paralysis of the facial and hypoglossal nerves in another, the paralysis coming on the tenth and third days or after six weeks. The paralysis spontaneously subsided in time, but in three cases fatal ascending suppurative meningitis developed. In two of these the operation was for relief of a pyemic or septic process, and the spinal anesthesia may have produced a point of lessened resistance where the germs circulating in the blood settled. In the third case a healthy man of 20, from a healthy family, was operated on for removal of hemorrhoids under spinal anesthesia with stovain-adrenalin. There were no by-effects at first, but then the temperature rose, headache followed, and the patient died on the fourth day of a meningococcus meningitis. This patient must have been a healthy, unsuspected meningococcus carrier, as no possible source of the infection otherwise could be surmised. Forty-seven out of sixty patients examined showed evidences of nephritis, but it soon subsided and no after-effects could be discovered. Spinal anesthesia is used at the clinic principally for operations below the costal arch, as no attempt is made to extend the analgesia higher by raising the pelvis or similar measures. Its main sphere is for chronic intestinal affections. General septic processes are now regarded as contraindications, although in dubious cases the absence of mi-

crobes from the circulating blood allows this form of anesthesia to be used in cases of acute osteomyelitis of the legs. Collapse from internal hemorrhage or other cause is also regarded as a strict contraindication. The spinal anesthesia was used in 6 diabetics with excellent results. The experience of others was also confirmed in regard to the fine way in which elderly persons tolerate spinal anesthesia. Its ill effects are undoubtedly due to the toxic nature of the substances used. Oelsner is now experimenting with saline solution at different temperatures. Chilled saline solution injected for spinal anesthesia in animals is giving promising results. He mentions that there are now 32 cases of paralysis following spinal anesthesia on record, but not permanent in any instance.

LUMBAR PUNCTURE IN CEREBROSPINAL FEVER.—Dr. Bernard Oettinger, Neurologist for the Denver City and County Hospitals, presents the following comments in *Colorado Medicine*, on this subject: The hopelessness of every well tried therapeutic measure in severe cases of epidemic cerebrospinal meningitis is without doubt the reason that lumbar puncture as a curative measure, in this disease, continues to be discussed. No doubt the procedure is justified as any measure would be that is undertaken systematically and having a rational basis for its practice. This, for the reason that uniformity of effect from any form of medication—unless the recently introduced serum treatment shall change the picture—seems impossible to attain. Nevertheless, Babinski (editorial, *Med. Rec.*, Dec. 14, 1907,) has recently termed lumbar puncture the most effective remedial procedure, and Bokay (*Deustch. Med. Wochensch.*, Nov. 21, 1907,) describes seventeen cases in which lumbar puncture was tried and in which ten recoveries resulted. The last author believes this procedure has a definitely curative effect, not only because of mechanical relief, but because of removal of pathogenic bacteria. In severe cases he advises repetition of puncture at intervals of from one to three days, the indications being the persistence of symptoms or their renewed increased severity. In infants protrusion of the fontanelles indicates the advisability of repeating the operation. In children not more than 30 c. c. should be removed at one

time. In the author's cured cases, total amounts of abstracted fluid varied from 165 to 350 c. c. If little fluid can be obtained, or if it is thick and purulent, it is doubtful if repetition of the measure will be of service.

VENESECTION IN APOPLEXY is warranted by a full, tense pulse, a labouring heart, with failure and acute distension of the right auricle and ventricle, and engorgement of the cervical veins.—*Dr. Leonard Guthrie, in The Hospital.*

THE INTRODUCTION OF MEDICANTS into the system by means of electrolysis, or so-called "ionic medication," has already received notice in these columns. It is largely due to Prof. Leduc, of Nantes, that the method has been developed. It has been shown to be one of considerable practical utility in a variety of conditions, and it seems probable that it will increase in popularity among the profession. It has been found a useful means of introducing iodine into sprained joints, and also for the absorption of gouty and rheumatic deposits. A pad soaked with a watery solution of iodine is placed around the joint and covered with a metal plate connected with the positive pole of the battery. In a similar way local anæsthesia can be produced with a solution of cocaine, but in this case the negative pole must be connected with the part to be affected. Rodent ulcers have been very successfully treated by electrolysis with zinc chloride solution, and good results have also been obtained in other similar superficial ulcerations. There are many technical details to be studied in regard to the strength of the current, kind of electrode and nature and strength of the solutions to be used, and there is undoubtedly a wide scope for further investigations on these lines.

PROFESSORS GERARD AND LEMOINE have been investigating the properties of bile with a view to discover a substance possessing antitoxic properties against tuberculous infections. They were led to these researches by the observations of Phisalix in 1897, who showed that bile and the biliary acids neutralize snake-venom, and that cholesterin acted as an antitoxin to snake-venom. Taking the view that the liver

is one of the chief seats of defence in the body against infections and intoxications, it seemed possible that substances of medicinal value might be extracted from bile. They have now succeeded in making a preparation from bile which they term paratoxine, and for which they claim special therapeutic value in tuberculous affections. This preparation can be administered by the mouth or injected subcutaneously, and it is said to form a most efficient medicament for intralaryngeal injections in cases of tuberculous laryngitis. In pulmonary tuberculosis the general symptoms—fever, anorexia, night sweats, and general malaise—are said to undergo rapid improvement, and at the same time expectoration diminishes, the number of bacilli decrease, and the pulmonary lesions tend to heal. It is admitted that in very acute or advanced cases paratoxine is of no great value, but, on the other hand, tuberculous enteritis is said to yield to the treatment in a marked manner. Confirmation of these results by other observers will be awaited with interest.

PSYCHIATRY.

KLEPTOMANIA.—Kleptomania is a morbid desire to steal, which may appear in a person of good social position, in whom such weakness would not be expected to exist. A well-to-do, middle-aged person may steal jewelry, ornaments, trifles from the counters of shops and afterwards secrete them. If discovered and brought before a magistrate a plea of insanity may be raised in her defence. To make the plea valid the defence should be able to prove that the accused did not know that her action was wrongful. Very often the defence is not accepted, and the kleptomaniac is held responsible. In great warehouses valuable goods are exposed to public handling and observation in a very tempting way, and a weak minded person may be induced to steal them on account of the apparent lack of guardianship of the goods. The warehouseman should be obliged to do his full duty in guarding his property. On the other hand, however, a true kleptomaniac would be likely to steal objects of no interest or value to herself, or

would not endeavor to raise money by selling them. Strict enforcement of the laws against theft acts as a deterrent and magistrates enforce these laws, although their action may expose the relatives of the accused to hardships. A story is told of a lady who, during the reign of Brian Boru, travelled through Ireland, adorned with jewels and bearing in her hand a white wand with a gold ring at the top. So well observed were the laws that she performed the whole of her journey without being robbed. A similar tale is told of Alfred the Great, and of Robert I., Duke of Normandy, both of whom are said to have kept their dominions in such excellent order that golden bracelets were hung up by the wayside and remained untouched. One would say that kleptomania must have been rare in those countries. Or it may be that the bracelets, being known to the public, could not have been disposed of without the detection of the thief, or that the punishment inflicted for theft was severe and exemplary.—*Can. Jour. Med. and Surg.*

AFTER CARE OF THE INSANE.—By Dr. William Mabon.

"Our experience is that the work of the After-Care Committee has been helpful to a large number of patients and also to the hospital. (Manhattan State Hospital, New York City, census October 1, 1907, 4,493 patients.) Were it not for their work, many patients would necessarily have been discharged to the care of the Department of Public Charities, as was formerly done. The circumstances of their going out into the world are far better under the present arrangement than they were at any time previous when the Department of Public Charities took charge of them. Under the previous conditions, they were either sent to the almshouse, or allowed to go directly on the streets of the city to seek friends or work without assistance from anyone, except such as might have been provided from the hospital. At the present time they are assisted and protected when they leave the hospital.

"The establishment of the After-Care Association in New York City has tended to increase the confidence in the administration of the metropolitan State Hospitals. Relatives of patients, as a rule, welcome visits from outside parties familiar

with the work, and yet not part of the hospital organization. They feel in that way that they get an unbiased report on the standard of care maintained in the hospital. By means of this Association the ward physician often-times gains the confidence of a patient who has been paroled or discharged, and he is then in a position to point out the dangers of illness, privation and overwork, and to enlighten him as to premonitory symptoms which, unless relieved, might lead to a relapse. The patient having these symptoms should be encouraged to come and see his ward physician, talk over the case with him, take his advice, and such medical treatment as in the physician's opinion was called for.

"The physicians in the State Hospitals who have co-operated with the State Charities Aid Association in the work of the After-Care of the insane see in this new branch of philanthropy a promise of valuable results in the prophylaxis of the disease which afflicts more than 27,000 persons in New York State alone.

"If this movement affords such a prospect of relief in one State, why should it not be undertaken in all States? The organizations may differ, but the work to be accomplished is the same. The fact that it has been continued so long and successfully in France, Switzerland, England, and other countries of Europe, and that it has been adopted by the Japanese, should be an incentive to our taking it up with vigor, and pushing the work to its utmost."—*Quoted by Board of Managers of the N. Y. State Charities Aid Association.*

ADOLESCENT INSANITY: A PROTEST AGAINST THE USE OF THE TERM DEMENTIA PRECOX.—Dr. J. C. McConaghey: in 1863, Kalbaum described a form of mental disease occurring at puberty and rapidly terminating in dementia; this is called hebephrenia. In 1874, the same author described the condition known as katatonia or insanity of rigidity. These terms do not appear to have been adopted till 1891, when Pick, under the heading of dementia precox, described cases including hebephrenia, characterized by maniacal symptoms followed by melancholia and rapid deterioration. This term has now been extended by Kraepelin, including under it hebe-

phrenia and katatonia of Kalbaum, together with certain forms of paranoia that undergo early deterioration. The author objects to the term dementia precox as applied to recent and curable varieties of mental disease, as it is unscientific to label a case as suffering from dementia and then to have to record such a patient's recovery, as must often be the case under the circumstances. The author proposes the adoption of the term adolescent insanity, and suggests its division into three groups: simple, delusional and katatonic. The term dementia precox applied to hebephrenia of stuporous psychic paretic type should be qualified, if retained as functional for it is often of recoverable form.—*The Journal of Mental Science*, April, 1905.

DANGER TO DOCTORS.—Contagious diseases, bad weather and night highwaymen do not seem to be the greatest danger the doctor has to contend with, but women, designing, malicious women, either disgraced, about to be or desiring to be. A reputable Detroit doctor recently had an experience to make one shudder. He was called, once, to see a woman whom he had never seen before. He found her suffering from a slight cold for which he prescribed and left. A week later she was taken to the hospital suffering from an abortion. Nearing death, the priest having administered the last sacrament, the prosecuting attorney and his stenographer present, she made a dying declaration that the doctor had committed an abortion on her. But she did not die. A month later the case was brought to trial, and instead of the ante-mortem statement, the woman was herself on the stand. On severe cross-examination she admitted that the doctor knew nothing at all about the case or her condition. She said she thought she would be sent to prison herself if she did not accuse some one. Laws should be made, making it a crime to solicit physicians to commit abortions and to better protect them from blackmail. Surely the crime is as great as to solicit or offer a bribe.—*E. S. McKee, Medico-Legal Notes, Medico-Legal Journal*.

REVIEWS, BOOK NOTICES, REPRINTS, ETC.

ANIMAL EXPERIMENTATION IN SCIENTIFIC RESEARCH, By Clark Bell, Esq., LL. D. Legislation in restraint of scientific experimentation on animals in aid of the acquisition of useful knowledge in Pathology, Physiology and the treatment of disease, and to stop animal experimentation in aid of scientific knowledge by means of animal experimentation are based on the assumption that the students and medical men thus engaged in pursuit of reliable data from this source, are cruel, inhuman and brutal in the discharge of their duties, and that the learned professors now occupied in this interesting work are, and have been conducting it in an inhuman, brutal, cruel and wanton manner, so atrocious and barbarous as to actually demand the intervention of the law to protect the American people from disgrace and obloquy.

So far as we are able to learn, not one case has occurred in this state (New York) which has given rise to any complaint from those scientific workers in our laboratories, who would be the first to make the charge of inhumanity or cruelty in making their experimentations.

In Missouri, last year, one such complaint was made, and the man who did it was promptly indicted, tried, convicted and punished for it, as would be done here under our statute if such a case had occurred.

The real motive of the movement is to stop animal experimentation by such legislation as would prevent its use for the acquisition of human knowledge in scientific exploration and endeavor.

It rests upon ignorance of the facts of the issues involved and a mistaken sense and view of what is the essence of humanitarianism and what is pre-eminently proper and commendable.

"Lamartine vividly describes his sensations when he first saw a calf killed by the butcher." Perhaps "Madame Belait would suffer as did Lamartine at such a spectacle or at witness ing a post-mortem of a relative.

"Lord Lister, one of the ablest of the British scientists, in speaking of the English act in restraint of animal experimentation, said:

"The act resulted in "hampering and some times entirely preventing legitimate and beneficial investigation." In his opinion "it serves no good purpose and interferes seriously with inquiries which are of paramount importance to mankind.

"Is it not a reproach upon English civilization and progress, that the eminent scientist, Sir Lauder Brunton, has been compelled to publicly state, "it has interfered to an enormous extent with physiologic work," and to add as a reproach upon the laws of his own country: "In some of my investigations, the object of which was simply to find out what the action of certain medicines was, I have been obliged to go to Paris to carry on my research in a foreign laboratory."

This paper justly maintains that the whole dignity of the medical profession is assailed in this outside onslaught upon physiological experimentation. If restrictive laws were proper, much less necessary, the suggestion should come from the medical profession.

The author reminds us that Charles Darwin was surely the most humane of men. The *New York Sun* quotes this eminent man and the author uses the quotation:

"Charles Darwin, the most humane of men, was not far wrong in his forecast of the consequences of indiscriminate law making in this matter. "If stringent laws are passed," he wrote in 1875, "and this is likely, seeing how unscientific the House of Commons is, and that the gentlemen of England are humane, as long as their sports are not considered, which entail a hundred or a thousandfold more suffering than the experiments of physiologists—if such laws are passed, the results

will assuredly be that physiology, which has been within the last few years at a standstill in England, will languish or quite cease."

And finally Darwin's dictum, "that he who retards the progress of physiology commits a crime against mankind."

LEGISLATION ON VIVISECTION, By Dr. J. Mount Bleyer, LL. D., F. R. A. M. S., of New York, Vice-President Medico-Legal Society. This forceful paper opens as follows: The great brain of the modern arch philosopher, Spencer, formulated this sentence: "Add to the power of discovering truth, the desire of using it for the promotion of human happiness and you have the great end and object of our existence."

If the question of vivisection be placed in the balance and weighed against all the prejudices by those who are agitating for the legislative prevention and regulation of vivisection, it will outweigh any arguments that may be brought up against it. No one doubts that the modern science of physiology is the very kernel and fundament of modern practice of medicine and is the result of the labors of thousands of the ablest men for years back. Should we allow with one sweep of the pen a law to become a menace to modern scientific research in this State? If the people of this State desire to undertake to place such an obstacle in the way toward the progress of medicine—let it be thoroughly aired by the judges of science who are in a position to do so. If we are to be judged for our wrong doings, let us be judged by our peers and not by fanatics, humanitarians and pseudo-scientists.

SOME OF HUMANITY'S DEBTS TO VIVISECTION, By R. W. Shufeldt, M. D., Major, Medical Department U. S. Army (ret.) Member Medico-Legal Society; Corr. Member Zool. Society of London, L'Alliance Scientifique Universelle de France; Anthropol. Soc., Florence, etc., etc.

On the evening of the 19th of February (1908) the Medico-Legal Society held one of its regular meetings at the Waldorf-Astoria Hotel, upon which occasion the present writer read his paper dealing with the question of vivisection and its detractors.

Some of the points appear below:

"The pressure of the blood in the arteries; the pressure in different parts of the arterial system; the influence of respiration upon circulation; the rapidity of the circulation of the blood and a great deal more referring to this most vital fluid. How have we come by nine-tenths of that information? Distinctly through vivisectional experimentation upon living animals performed in hundreds of laboratories.

"When the floor of the fourth ventricle of the brain is irritated artificial diabetes is produced, and we find sugar in the urine. The experiment is in nearly all instances made with rabbits: the operation is almost entirely painless, and is seriously interfered with if we administer an anæsthetic or woorara.

"Were we to eliminate from our present knowledge of all we know of the nervous system what has been gained through the investigations upon living animals, both with and without anæsthetics and woorara, of such brilliant and talented experimenters as Sir Charles Bell, Magendie, Muller, Shaw, Waller, Bernard, Brown-Sequard, Matteuci, Chauveau, and a host of equally eminent observers since, the amount of information we would have left would be about co-equal with what physiologists knew of that system two and a half centuries or more ago."

At the close of reading of Mr. Bell's paper he recommended adoption of the following resolutions, in relation to the Legislation now before the New York State Legislature:

"Resolved, That in the opinion of the Medico-Legal Society, any legislation regulating experiments upon living animals, in the advancement of scientific research is neither essential nor necessary.

"Resolved, That the medical profession is entitled to the confidence of the public in the use and practice of vivisection, and that it would be the first to propose and recommend restrictive regulations to the practice if it was desirable or necessary.

"Resolved, That in the opinion of this Society the sciences of Pathology, Physiology and the Therapeutics and Treatment

of Diseases owe an enormous debt of gratitude to the medical profession for the knowledge thus acquired by the experiments upon living animals in every department of scientific knowledge; and that legislation tending to restrict its free use by scientific men in their investigations would be a great public calamity, and tend to retard the progress of the acquisition of knowledge valuable to mankind, and arrest that scientific research in which the American nation now occupies a high and most commanding position."

WHAT ARE PELLAGRA AND PELLAGROUS INSANITY? DOES SUCH A DISEASE EXIST IN SOUTH CAROLINA, AND WHAT ARE ITS CAUSES? An Inquiry and Preliminary Report. From J. W. Babcock, M. D., Columbia, S. C. Written by Supt. State Hospital for the Insane, Columbia, S. C., December 30, 1907. Reprint from S. C. Board of Health. Report of 1907.

The author presents some cases and answers the inquiry as follows:

DEFINITION AND DESCRIPTION.—What then is pellagra? Van Harlingen calls it "A complex disease characterized by three classes of symptoms:

"1. A squamous erythema confined to those portions of the skin which are exposed to the action of heat and light.

"2. A chronic inflammatory condition of the digestive passages shown chiefly by obstinate diarrhoea.

"3. A more or less severe lesion of the nervous system, leading at times to mental alienation and paralysis. These various symptoms are at first insignificant, and in a certain way periodic; they begin or recur in spring, and diminish or disappear in winter. Later, they become persistent, more and more marked, and finally terminate fatally."

Griesinger, in 1861, after seeing cases of pellagra in the asylums of Northern Italy, doubted the specific nature of the disease, but thought that in its final state it greatly resembled general paralysis of the insane.

In 1883, Spitzka, of New York, announced in his excellent treatise on insanity:

' Pellagrous insanity will not be discussed in this volume, as it does not occur in America, and is limited to such countries as Italy, where maize forms a staple article of diet and where the disease known as pellagra, which is attributed to the living on spoiled maize, occurs in an endemic form."

Says Manson, in 1907:

"Indeed, there are vast regions in which maize is extensively cultivated and much eaten, but in which pellagra is absolutely unknown. Almost convincing example is that of the United States of America."

Says Tyson, in Ziemsen's *Clyclopedia*:

"Pellagra is a disease which is thought to be due to a fungus which infects maize or Indian corn. It occurs particularly in Lombardy and is characterized by a scaly and wrinkled condition of the skin, especially of those parts exposed to the air. The strength and mental faculties are affected. Sensation is obtunded and cramps and convulsions supervene, much as in ergotism."

Macpherson, in 1899, expressed the opinion that:

"Pellagra is a disease of the nervous system accompanied by mental symptoms and followed often by degeneracy in the descendants. This transmitted degeneracy is characterized by mental and physical feebleness and a marked predisposition to the recurrence of the affection in the predisposed offspring. The disease is common in the southern parts of Europe, especially in Italy, and has been indubitably traced to the eating of immature and otherwise unwholesome maize."

From Mendel, of Berlin, we learn that:

"Pellagra shows in the prodromal stage general distress, fatigue easily brought on, disturbances of digestion, usually with areas of redness of the skin, which is chapped, cracked, and deprived of epithelium. The second stage is dominated by pathological phenomena of the intestinal tract, and the third stage shows, besides disturbances of the nervous system (weakness and pareses, paresthesias and anesthetics, weakening of the cutaneous reflexes and exaggeration of the

tendon reflexes), a melancholic depression, which often passes to the stuporous form."

"It will thus be seen that true pellagra appears to be akin on the one hand to ergotism and lathyrism, and on the other to the parietic forms of insanity, while in some of its manifestations it is not unlike acute delirium.

"**HISTORY.**—The earliest account of this malady as an endemic affection comes from Spain, where it was recognized in 1735. It appeared in Italy just prior to 1750, and was first scientifically investigated in 1771. It first appeared in South-west France in 1829. Its present distribution embraces the districts of Europe situated within a zone extending from 42 to 46 N. It is found also in Egypt and Asia Minor.

The disease attacks males and females indiscriminately and no age is exempt. Cases are on record of children of fourteen months and two and a half years of age. Under sanitary and preventive management, it is claimed that pellagra has almost disappeared from France, but there are in Italy 100,000 cases of the disease; that is, 10 per cent. of the rural population. About 10 per cent. of pellagrous cases become insane. It is said that there are upwards of 50,000 cases of pellagra in Roumania. Sandwith found it in 1900 among the colored lunatics on Robben Island.

There is a voluminous literature on the subject in Italian, French and German, as is shown by over eight pages of bibliography, in Volume XII, Second Series, of the Index Catalogue of the Library of the Surgeon-General's office in Washington. But in English, outside of the short accounts or definitions of the disease in the text-books, articles are few and far between.

Although recognized now as existing in Yucatan and Campeche, as well as in Brazil and the Argentine Republic, pellagra has rarely been reported as being found in the United States.

In April, 1907, however, Dr. G. H. Searcy read before the Alabama State Medical Association an account of an epidemic of acute pellagra in the State Hospital for Colored Insane, at Mt. Vernon, Alabama. Since the opening of the

hospital, in 1901, three or four cases of a strange and fatal skin disease had occurred, but its true classification was not recognized. In the late summer and early fall of 1906 the epidemic appeared. In all, 88 cases occurred, with 57 deaths, a mortality of about 64 per cent. Since the observation of these cases among the colored insane patients some four or five others have been recognized among the white patients at the Tuscaloosa (Alabama) Asylum.

In the report for 1907 of the Alabama Insane Hospitals Dr. J. T. Searcy, Superintendent, just received, it is stated that: "There was last fall (at the Mt. Vernon Hospital) an epidemic of pellagra, which was very fatal. This being a heretofore unknown disease in America, it was not recognized as such for some time. Cases have, since then, been brought into both hospitals from different parts of the State, showing that it occurs in this part of the country. There have been nine deaths at the Bryce Hospital during the past twelve months from pellagra, five of them were infected when they came."

A sporadic case diagnosed as pellagra was reported by T. C. Merrill, M. D., of Colorado, Texas, in September, 1907.

SYMPTOMS.—Usually the disease first manifests itself in the spring, the earlier symptoms pointing to the gastrointestinal tract and the cutaneous structures, while the later and more advanced symptoms involve the cerebral and cerebro-spinal systems.

In his monograph (1903), Procopiu gives this definition:

"Pellagra is a periodical disease, having remissions and exacerbations. It manifests itself in persons exposed to its invasion at the beginning of spring, becomes more aggravated until summer, and then begins to lessen little by little to the point of giving during the winter, the illusion of cure. It returns each year at the same season, so long as the cause persists; that is, the eating of the products of Indian corn."

Says Radcliffe-Crocker, in substance:

At first there is weakness and lassitude, giddiness, headache, articular pain, severe pain in back, radiating to the limbs, especially the hands and feet; the tongue is furred, the epigastrium tense and painful, and the bowels are loose, sometimes with slight jaundice. The skin of the forearms, elbows, face and neck are affected with dermatitis. The erythema may develop in 24 hours and last ten to eighteen days. It consists of a diffuse bright, dark or livid red erythema, which disappears on pressure unless hemorrhagic. The skin is swollen tense and itches when exposed to the sun. After two weeks the erythema subsides; desquamation follows, leaving the skin thickened and pigmented. The nails and hair are unaffected. After several attacks the skin dries, withers and wrinkles. The skin manifestations thus present three stages: (1), congestion; (2), thickening and pigmentation; (3), atrophic thinning.

Upon recrudescence after the first attack the patient becomes emaciated and weak, with headache and pain in back, and tenderness on pressure near the dorsal vertebrae; the knee-jerk is exaggerated. The tongue gets denuded, is red and dry; there is a burning sensation in the mouth; deglutition is painful; diarrhoea increases to profuseness; all the cerebro-spinal symptoms, many of them meningeal, are aggravated, and the patient is delirious, sinks into a typhoid state and dies.

MENTAL SYMPTOMS.—These usually assume the type of melancholia. The milder forms show merely a retardation of ideas, disinclination for thought and activity or simple mental depression. Later, the disease may advance to a profound melancholia, even refusal of food, and suicidal tendencies manifesting themselves. Maniacal symptoms are rarer, but sudden outbursts of delirium or excitement may occur in cases of apparent stupor.

Clerici (1855) described pellagrous insanity as consisting of "a vague, incoherent delirium, accompanied by stupor, loss of memory, and by loquacity without special disorder of intelligence or violent excitement."

Pellagrous insanity is divided by Procopiu into acute and chronic delirium. The acute delirium may be associated with alcoholism, when it presents the symptoms of delirium tremens. Or acute delirium may manifest itself in the course of chronic delirium. In the latter case the patient who has been quiet and apathetic becomes restive, as if tormented by an obsession. The delirium may become furious leading to suicide or murder. Intense religiousness may be divided into the melancholy, demented and stuporous types, but they are usually melancholy of an anxious type. The termination is dementia.

"Pellagrous insanity," says Regis, "is one of the most grave varieties, not in itself, but because it is the expression, in the sphere of intelligence of a general disease, progressive in its course and inevitably ending in cachexia and death."

Says Warnock:

"The frequent early occurrence in pellagra of symptoms of dementia, with loss of memory and childishness, points to organic brain disease, and reminds one of the mental condition of patients suffering from organic dementia due to gross brain lesions, and of the later stages of general paralysis. Indeed, the last stage of a general paralytic of the melancholic type and that of a pellagrous patient have many resemblances to one another."

ETIOLOGY.—Among the abandoned theories about the origin of pellagra may be cited those of its being an expression of leprosy, scurvy, syphilis or alcoholism.

Tuczek concludes that "pellagra is due to certain toxic substances developed in the course of the decomposition of Indian corn, and possibly under the influence of epiphytes on the corn." "The maize cut before it is ripe, gathered in rainy seasons, stored away damp, sown from affected seed, * * * all contribute to the engendering of some toxic development in the grain, which forms the true pellagrous poison.

AMERICAN HEALTH, Volume I, March, 1908, Number I. The Official Organ of the American Health League with the motto from President Roosevelt that "The preservation

of national vigor should be a matter of patriotism," is on our review table.

The purpose of this periodical and of the league it represents is to promote public health. It should be helped by every humanitarian heart and patriot, as John Pease Norton says:

"For a nation, to permit great wastes to go unchecked is more than a suicidal policy; for an evil more destructive than race suicide is race homicide. There are four great wastes to-day, the more lamentable because they are unnecessary. They are preventable death, preventable sickness, preventable conditions of low physical and mental efficiency and preventable ignorance. The magnitude of these wastes is testified to by experts competent to judge. They fall like the shades of night over the whole human race, blotting out its fairest years of happiness."

"The facts are cold and bare—1,500,000 persons must die in the United States during the next twelve months; equivalent to 4,200,000 persons will be constantly sick; over 5,000,000 homes, consisting of 25,000,000 persons, will be made more or less wretched by mortality and morbidity.

"We look with horror on the black plague of the Middle Ages. The black waste was but a passing cloud compared with the white waste visitation. Of the people living to-day over eight millions will die of tuberculosis, and the Federal Government does not raise a hand to help them."

President Roosevelt while "emphatically disapproving a Cabinet Health Officer being created at the head of a Department of Health," nevertheless believes that we could with advantage have a Bureau of Health to be put under one of the existing departments. Well, let us have the bureau. It is needed. The cabinet officer will surely come next. He will be no disadvantage to the administration of the government when he is finally made as he will be an ex-officio member of the cabinet for "there is constantly growing interest in this country in the question of the public health." At last the public mind is awake to the fact that many diseases, notably tuberculosis, are national scourges. The work of the state and city

boards of health should be supplemented by a constantly increasing interest on the part of the National Government. The Congress has already provided a bureau of public health and has provided for a hygienic laboratory. There are other valuable laws relating to the public health connected with the various departments. This whole branch of the Government should be strengthened and aided in every way."

BIER'S HYPEREMIC TREATMENT, By Willy Meyer, M. D., and Prof. Victor Schmieden. *Bier's Hyperemic Treatment in Surgery, Medicine and all the Specialties: A Manual of Its Practical Application.* By Willy Meyer, M. D., Professor of Surgery at the New York Post-Graduate Medical School and Hospital; and Professor Dr. Victor Schmieden, Assistant to Professor Bier at Berlin University, Germany. Octavo of 209 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1908. Cloth, \$3.00 net.

This is a valuable showing of artificially induced hyperemia in therapeutics.

The work is well illustrated, demonstrative and suggestive of compression and tourniquet, suction and hot air methods of hyperaemic treatment. Rich in local resource, illustrated and described for the active practitioner seeking to know all of adjunctive methods of successful general therapy.

This book has been well received by the profession at home and abroad. Tuffier, of Paris, has prefaced an instructive epitome of this book and Schmieden, Chief of the Clinic of the University of Bonn, Mme. Fortoul being the translator.

NURSING THE INSANE, By Clara Barrus, M. D., Assistant Physician Middletown State Homeopathic Hospital, Middletown, N. Y. The Macmillan Company, 1908. Price, \$2.00 net.

This is an interesting book on an important aspect of psychiatry, for reference, in a hospital for the insane, more especially than in any other hospital, the influence and deeds of the nurse may harm or help the patient. Here invironing influences are most important. This book is a fit companion

for the "good attendant" by Isaac Ray, now out of print and the rules for attendants of the best hospitals.

The book does not claim to be and is not a masterpiece of psychology, but its psychological injunctions are in the main correct. It would have been well if nurses were told that they can not always estimate an insane person's past by what the insane say of themselves for they can not always tell how much of past or present delusion may tincture their biography. (p. 271).

It is well for nurses to understand the insane and though difficult, they should strive to not misunderstand them, but clinical psychiatry is a long and difficult study.

The morbid egoism of the insane is the chief matter for the nurses' observation and comparison and his changes of disposition and character connected therewith.

The author's description of the ideal nurse (page 6) is good and the chapter also contains many excellent suggestions. The advisory and suggestive and substitutive suggestive methods "the soft answer that turneth away wrath"-ful delusion belongs to the high art of true psychotherapy.

The book will interest and aid the nurse of the psychopathic and entertain in houses of leisure and reflection. Everyone who aspires to the highest usefulness in the exalted vocation of minister to minds diseased can find food for profitable reflection written in the pages of this timely book.

FOURTH ANNUAL REPORT OF THE TRUSTEES of the Taunton, Mass. Insane Hospital. It is gratifying to note the managements appreciation of its medical officers, superintendent, assistant physicians, pathologists, etc., as appears in this and other hospital reports coming to us. Right appreciation procures and retains good service in this arduous work for the welfare of the afflicted.

THE SUCCESSFUL APPLICATION OF TONIC MEDICATION is an interesting booklet sent out by the Purdue Frederick Company discussing the uses of Gray's Glycerine Tonic and combinations. As this combination is well known and is the same as one of the staff of this journal was accustomed to use

daily at Utica we do not hesitate to commend it for prescription purposes provided the firm continues to furnish the formula to physicians.

QUARTERLY BULLETIN of the Northwestern University Medical School comes to us with a good likeness of Dr. Hollister as a frontispiece, with brief biographies and loyal tributes to the memory of the late Dr. Nicholas Senn, now immortal in surgical and literary annals.

WIXFORD'S PRECIPITATION, PURE WATER SUCCESS FOR ST.

LOUIS.—Captain Carl R. Darnell, assistant Surgeon of the U. S. A. has an article in the April *Military Surgeon* on the purification of water which will interest hospitals and citizens. In it the alum process, the old Clark process with calcium hydroxid precipitating are compared with the bromine, chlorine, hydrochloric acid, potassium permanganate and ozone chemical methods.

St. Louis did a grand deed when it sufficiently made a liberal appropriation, which through the assiduous efforts of Mr. John Wixford succeeded in so nicely adjusting the proportions of these precipitants as to change the turbid water of our great Mississippi into a clear sanitarily potable beverage, now pronounced by chemical analysis to be entirely free from toxic bacteria. Better drinking water can not be found in the world. Now for the abatement of the noise and dust nuisance and dangers and for pure clean food and St. Louis will soon save from the tables of mortality enough of its health imperiled population to make up the million the merchants are striving for so strenuously.

One great saving feature of the river from which St. Louis gets its water supply is its large proportion of floating and precipitable clay, sand and rapid current. This goes readily to the bottom with its adhering microbes under Wixford's precipitation.

THIRD ANNUAL REPORT OF THE MANHATTAN STATE HOSPITAL

Dr. Wm. Mabon, Superintendent. For 1907. All of the Insane Hospital reports coming to us are showing marked improvement in regard to medical matters. There are

many excellent features in this report, chief among them being the splendid tabulated record of medical examination findings, the pathologist's report and the causes and percentages thereof both of the insanities and the deaths. As usual alcohol has been found to be the direct causation in a large number of both.

THE NEED OF POPULAR LECTURES ON INSANITY, By Henry R.

Stedman, M. D., Brookline, Mass., from a source of competent intelligent observation, reprinted from the *Boston Medical and Surgical Journal*, October, 1907.

A valuable paper containing information as to the true nature and signs of approaching insanity and concluding that the terrors of insanity and its treatment have held the boards far too long, and the more we are able to say with truth that will tend to lessen its horrors in the minds of the community, the better shall we serve the purposes of true psychiatry and the more widely and generally the nature of our work is known, the more the dignity and importance of our calling is enhanced.

MOTOR APPARATUS OF THE EYES. A Treatise of the Motor Apparatus of the Eyes by George T. Stevens, M. D. Ph., D., illustrated with 184 engravings, some in colors published by F. A. Davis Company, Philadelphia.

This valuable well written and illustrated book should be in the hands of every Neurologist, Ophthalmologist, Alienist and general practitioner. It is a fit companion to the larger book of more extensive scope edited by Posey and Spiller on the Eye and the Nervous System, briefly noticed in our last issue. F. A. Davis are the publishers of Motor Apparatus of the Eye. The J. B. Lippincotts publish the other.

Like Ranney, Gould and some other ophthalmologists the author attaches rather more importance to certain eye states as influencing the brain than influencing eye symptoms. But we are not disposed to quarrel with this pardonable ophthalmoscopic predilection. It does not disturb the neurologist who knows that the eye as seen by the practicing ophthalmologist is a peripheral central part of the nervous system having important central relations and influences and who knows where these influences are sequent, antecedent

and reciprocal and in consequence sometimes primary in one part and sometimes in the other of the inter-related nervous mechanisms of eye and brain and brain and eye.

NERVOUS AND MENTAL DISEASES. For Students and Practitioners by Charles S. Potts, M. D., Professor of Neurology, etc., Medico-Chirurgical College, Philadelphia. Second Edition, revised and enlarged. Illustrated with 133 engravings and 9 plates.

This is one of the best and most concise of the several excellent text books edited by American authors on neurology and psychiatry. It is concise and practical and clear in text and illustration. Different text books on Neurology are essential as going through a new country by different routes and different guides. They add continual novelty and interest to observation. Whatever other books may have been commended by us on the subjects above treated, this book will be found to be a valuable, congenial and instructive companion of amphitheatre or study room. The author makes a good showing of the reflexes in diagnosis, omitting, however, the important virile reflex so essential to virility.

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THE REVISTA ITALIANA DI NEUROLOGIA, PSYCHIATRIA ED ELETTROTHERAPIA, Volume One, Numbers One to Four under the direction of Professor G. d'Abundo, Director of the Clinic of Mental and Nervous Diseases of the University of Catania, Italy, is received filled with interesting contributions from Professor Abundo, Cajal and other distinguished colleagues and collaborators. We take pleasure in complying with the request for exchange.

THE BATTLE CREEK SANITARIUM SYSTEM HISTORY, ORGANIZATION AND METHODS. By J. H. Kellogg, M. D., Superintendent Battle Creek, Michigan, 1908, is an attractive and instructive exhibit of this institution, well illustrated with photogravures of instruments and processes of precision in

diagnosis and remedial resource. The forms of exercise, massage and electricity are well illustrated. The grounds and buildings are nicely shown, the culinary department, dietary baths and herbariums likewise. An interesting discussion of Yoghourt and its antagonistic power over auto-intestinal putrescency and autointoxication occupies a part of this book. The whole constituting an interesting and excellent advertisement.

The criticism we have to make of this establishment is that altogether too much is undertaken with too many departments requiring expert specialization under a single dominant surgical head with too great a propensity to operative interference and a too uniformly vegetable, and in some instances inadequate, dietary. At least that is the effect the results with some patients who have come to us unimproved after going through the routine of this great sanitarium. Too much of the general and too little of the special individual characterizes the treatment and methods of this over grown institution. It is a good place for the over-fed and over-sedentary and little mentally relaxed. With agreeably selected social affinities, people only functionally neurasthenic and melancholic from a life too solitary might find recuperation there. The palm garden and the fecal examination are also interesting features of the sanitarium colony plan of treatment.

THE BORDERLAND OF EPILEPSY. Feints, Vagal Attacks, Vertigo, Migraine, Sleep Symptoms, and the Treatment. By Sir William R. Gowers, M. D., F. R. P. F. R. S., Hon. Fellow Royal College Physicians, Ireland, Member of the Society Medicins Russes of St. Petersburg and of Royal Society of Science, Upsala.

These lectures by the distinguished London alienist and neurologist are terse differentiations between the true and the false in epileptoid appearing symptoms. They should be read by all careful and daily mind broadening practitioners. The author draws the line of distinction of a close neurological observer and his descriptions of morbid neurology within the scope of this interesting book are true to nature.

The author is particularly plain and correct in his ref-

utation of the too often erroneously asserted connection of migraine with epilepsy. They are undoubtedly clinically distinct, their relations are certainly slight and exceptional. This error in observation and conclusion is rightly and opportunely combated in the several pages of the author's conclusions.

The author is equally clear in his discussion and description of the various forms of sleep sickness—the narcolepsia—from the night terrors of children and somnambulation to fly disease of South Africa to the sleep states of true epileptoid and those of syncope, psychasthenia and hysteria.

The chapter on some sleep symptoms is worth the price of the book. The author writes throughout the book as he speaks and one who knows him personally recognizes the man in his manner of diction and the friend and true clinician in every chapter of this valuable contribution to a most interesting and not yet generally sufficiently appreciated phase of neurological diagnosis.

The book is based upon a special list kept by the author of all cases which seemed to have been on the borderland of epilepsy, "near it but not of it" and contains the deductions of one well fitted by right clinical experience and bedside thought to rightly deduce correct conclusions from them.

The price of this book is \$1.25 net.

ST. LOUIS SKIN AND CANCER HOSPITAL for the Study and Treatment of Cancer and Disease of the Skin. Second Annual Report—1907.

This institution is in good hands and makes a good showing. It strikes us that it would be better if cancerous affection only were received leaving out the non-cancerous skin disease.

"WOMAN" A Treatise on the Normal and Pathological Emotions of Feminine Love, By Dr. Bernard S. Talmey, Gynecologist to the Yorkville Hospital, Former Pathologist to the Mothers' and Babies' Hospital For Physicians and Students of Medicine and Jurisprudence; with 23 Drawings in the Text, Second Enlarged and Improved Edition. The present edition only confirms the good opinion expressed of

the first edition, namely that the psychiatrist and neurologist will find it an aid to his practice and the forensic student of mind and brain will likewise find use for it in court. Price, \$3.00. Practitioner's Publishing Co., 55 W. 125th St., New York.

THE AUTO PROTECTIVE RESOURCES OF THE BODY.—A new foundation for scientific Therapeutics is the caption of a valuable and instructive contribution on this subject by Charles E. de M. Sajous, M. D., of Philadelphia.

This attractive paper was read by invitation before the American Therapeutic Society and the Philadelphia branch of the American Pharmaceutical Association, May 7th, 1908.

This is a most valuable and timely effort to stem the vicious tide of therapeutic nihilism which has set in through surgical skepticism whose main reliance is the knife.

The exclusive air, food and water apostles as therapeutic nihilists and Professor Osler in his doctrine of self limited diseases and looking on while nature and disease have it out are justly attacked.

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We re-iterate the favorable opinion, given in review of the first edition.

THE SUBMUCOUS RESECTION OF THE NASAL SEPTUM.—Some remarks based on seventy-five cases. By Lee Maidment Hurd, M. D., New York City.

MIND, SOUND AND UNSOUND.—By F. W. Langdon, Medical Director Cincinnati Sanitarium—Another one of this good alienist's excellent contributions to clinical alienism.

THE SYSTEMATIC OCCUPATION AND ENTERTAINMENT OF THE INSANE IN PUBLIC INSTITUTIONS, by Eugen Cohn, M. D. First Assistant Physician, Illinois Southern Hospital, Anna, Ill.

Is a very pertinent subject of study—proper occupation and entertainment is an essential part of psychotherapy.

Ideas that Have Influenced Civilization. By William Lee Howard, M. D.

The Communal Life of Physicians—Its Cultivation and Value. By Leartus Connor, A. B., M. D., Detroit, Mich.

The Duality of Man. Chairman's Address in the Section on Ophthalmology at the Fifty-Eighth Annual Session of the American Medical Association, Atlantic City, N. J., June, 1907. By C. G. Savage, M. D., Nashville, Tenn.

Massillon State Hospital, Fifteenth Annual Report of the Board of Trustees and Officers. To the Governor of the State of Ohio. For the Fiscal Year Ending November 15th, 1907.

The Sanatorium Treatment of Mental and Nervous Diseases. By Dana F. Downing, M. D., West Newton, Mass., Assistant Physician in the Newton Nervine.

Gall Bladder Disease with Special Reference to its Gastric Symptoms. By Philip King Brown, M. D., San Francisco, Cal.

Report of Committee on Training Schools for Nurses.

Effects of Baths on Blood Pressure. By Philip King Brown, M. D., San Francisco.

Symptomatology and Diagnosis of Acute Articular Rheumatism. By Philip King Brown, M. D., San Francisco.

Deviations and Deformities of the Nasal Septum; With Special Reference to Possible Results Following the Submucous Operation. By Bryan De Forest Sheedy, M. D., Instructor in Diseases of the Nose and Throat in the New York Post-Graduate Medical School and Hospital, etc. With Com-

ments by O. F. Freer, M. D., and W. L. Ballenger, M. D., Chicago. Illustrating deformity following the removal of cartilage from nose.

A Resume of the Insanities. By Robert S. Carroll, M. D., Asheville, N. C.

Nasal Catarrh, Mouth Breathing, Hay Fever and Asthma. By Bryan De F. Sheedy.

Channels of Infection in Tuberculosis. Extracts from a Clinic Given in the N. Y. Post-Graduate Medical School and Hospital. By Dr. Bryan De F. Sheedy, Instructor in Diseases of the Upper Respiratory Tract.

The Influence of Occupation in the Prevention of Mental Reduction. By H. A. Tomlinson, M. D., Superintendent St. Peter State Hospital.

Medicine, the Physician and the Public. By H. A. Tomlinson, M. D., St. Peter, Minn.

The Principles Underlying the Treatment of Tuberculosis. Read before the American Therapeutic Society, Washington, D. C., May 4 to 7, 1907. By F. M. Pottenger, A. M., M. D., Monrovia, California.

Review of Dreyfus' "Die Melancholie; Ein Zustandsbild Des Manisch-Depressiven Irreseins." By Frederic Lyman Wells.

Strangulation Resulting from Distention of Hollow Viscera. Its bearing upon Appendicitis, Strangulated Hernia and Gall-Bladder Disease. By Cornelius Van Zwalenburg, M. D., of Riverside, Cal. Reprinted from Annals of Surgery. The subject is well treated by a capable surgeon personally known to the editor.

The Medical Uses of Carbonic Acid. By Thomas E. Satterthwaite, M. D., Professor of Medicine, New York Post-Graduate Medical School and Hospital.

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Central Indiana Hospital for Insane. To the Governor. 1907.

The Submucous Resection of the Nasal Septum. Some Remarks Based on Seventy-Five Cases. By Lee Maidment Hurd, M. D., New York City.

The Preferable Method of Anterior Fixation of the Uterus When the Abdomen is Open. By H. S. Crossen, M. D., Clinical Professor of Gynecology, Washington University, etc. A good paper from a good source of clinical skill.

Sinusitis and Its Treatment. By W. F. A. Schultz, LL.B., M. D., D. M. D.

Specific Immunity and X-Ray Therapeutics. By A. W. Crane, M. D., of Kalamazoo, Michigan.

The Surgical Treatment of Tubercular Peritonitis: With Report of Cases. By H. C. Dalton, M. D., St. Louis, Mo.

The Sanatorium Treatment of Mental and Nervous Diseases. By Dana F. Downing, M. D., West Newton, Mass., Assistant Physician in the Newton Nervine. This is a good showing of the need of sanatorium treatment in many cases. A new environment is good therapeutics for the insane and especially a good distance from home and the persistent visits of relatives and neuropaths of the home neighborhood and family.

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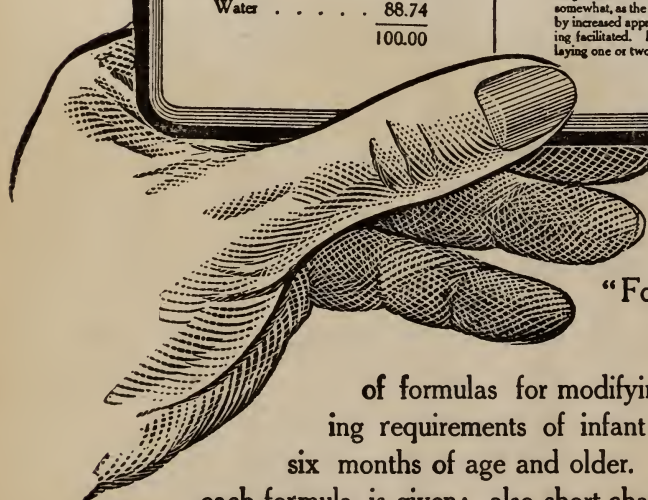
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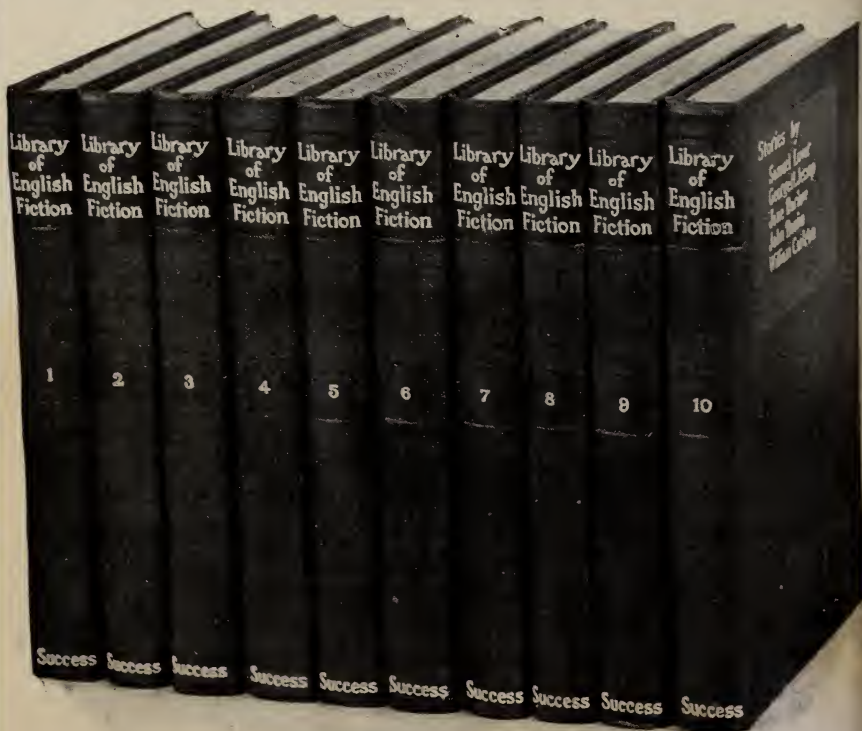
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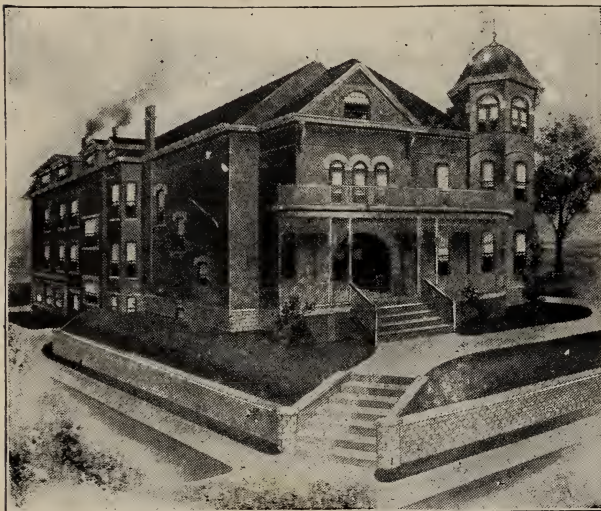
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That seems to have grown cataleptic,
Don't cherish hard feeling because of the dealing—
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When your gas meter runs into thousands of feet,
Till you cuss like a terrible sinner,
Don't call it a liar until you inquire
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And woman, of course, without question—
Would bitterly grieve at the hint they'd deceive,
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THE
ALIENIST AND NEUROLOGIST.

VOL. XXIX. ST. LOUIS, AUGUST, 1908. No. 3.

AN INSANE HOSPITAL ANNEX REFORMATORY
AND SANATORIUM FOR INSANOIDS OR
SEMI-FOUS.*

By C. H. HUGHES, M. D.,

ST. LOUIS.

Former Superintendent Missouri State Insane Hospital Number One; Member American and Honorary Member British and Russian Medico-Psychological Associations; Editor *Alienist and Neurologist*; and Dean of the Faculty and Professor Psychiatry, etc., Med. Dept. Barnes' University, St. Louis.

WHEN the places for the care of the insane were first established, they were called asylums, receptacles. The English Bethlehem in London, created by philanthropic followers of the Golden Rule and through the conception perhaps, that whatever they meted unto others would be meted unto them again, soon came to be called by the unsympathetic populace by the name of Bedlam. The people then not yet over the impress of the old heathen saying that "those whom the gods would destroy they first make mad," probably regarded Bedlam as simply a place of detention to protect the people from the menace of their freedom while the gods, or one God, was working out his will toward them.

*Written to be read at the Guatemala Meeting of the Pan-American Congress.

At any rate, up to the time of Chirugi, the immortal Italian psychiatric reformer, and Pinel of La Charenton, whose good work did more than that of any other man to immortalize himself and the noble charity of France, more than half the world regarded the lunatic as a fiend incarnate and, like the willing counsellors but "miserable comforters" of the patient God-trusting Job, believed that the insane deserved all the afflictions of their miserable existence. Some of them perhaps did and others do so believe to this day, but it is not for us to join in judgment upon them, though there are avoidable causes of insanity, such as immoral passion and propensity voluntarily indulged in, whose culmination is mental overthrow. But the element of volition, uninfluenced malevolently by inherent defect of organism, is difficult to single out among the erratic, at times. It would not be wise therefore for us to conclude that wisdom would die with us as Job said his "miserable," reproachful comforters thought "no doubt" of themselves.

Medically inspired philanthropy, since Pinel, Chiarugi, the Tukes and Rush better understand him, and hence in more charitable spirit, has provided him with homes for kindly care, custody and treatment, knowing that the insanity of the most of them is not self-developed and when self-developed, is done so, chiefly through ignorance of the damaging influences of over-indulged passions, griefs, alcoholic and other brain-breaking causes, or through hereditary tendencies revealed in the spasmodic and insane diathesis.

While there is an element of hereditary psychopathy in the insanoids or semi-fous and a factor of responsibility in such among them who, with intelligent knowledge of the fact and the brain and mind damaging results of unbridled propensities, give their vicious tendencies a loose rein, there is both extenuation and responsibility in these unfortunates to be considered, in dealing with them. We owe them the bestowal of a knowledge of themselves and helpful restraint and instead of waiting for the completed psychopathy to develop to the degree that all may recognize the insanity, they should be committed to some place and home, safeguarded from the

violence and antipathy and uncharitableness of ignorance, and enlightened about themselves and helped in the direction of normal self-regulation and personal happiness.

An insane hospital with its many morbid vagaries and impulsive hallucinations, illusions and delusions, may be judiciously used as a demonstrative school of instruction for insanoids and for other more completely insane. I once overheard one patient observing and commenting on the insane speech and conduct of another, thus: "Am I as big a fool as he?" Another upon being asked his opinion of a fellow patient revealing his peculiar insane vagaries, would say, "he's a fool," sometimes using a more emphatic expression. A homicidal patient of mine and appearing sane to the casual non-expert visitor, had shot and killed a harmless negro domestic man servant of a neighbor, under the delusion that the negro cohabited with the patient's wife. This insane homicide was a physician whose diagnostic and prescribing capacity were good, for I often tested them, using his prescriptions once for a pneumonia patient who recovered under the treatment out-lined. He had delusion of telepathy and of audition.

The Major Hunter, of Fulton, to whom I have elsewhere referred, expressing his opinion of the people in the beginning of the civil war that they had all gone crazy, illustrates the capacity for correct observation of the insane at times, both within and without asylums for the brain and mind deranged.

The insane often reveal their awakening to a knowledge of their true condition of mind by noticing the bizarre actions of other inmates and learning the nature of the institution in which they have been placed. I have known some instances where convalescence toward sanity began after the first day and night in my hospital and continued uninterruptedly to complete recovery, mostly from the psychotherapeutic influences of their new environment.

Contrary to the commonly prevalent idea as to the damaging influence of the insane hospital on the minds of the mild cases of insanity, I have known the gradual revelation of the nature of the institution, the kind and soothing treatment and therapy and the cautious introduction of the graver

cases to their attention with a statement that it was fortunate that they came early under treatment, to have a salutary effect towards cure. Melancholiacs, wild, agitated, acute delirious and manic depressive, stuporous and suicidal and alcoholic forms, have been helped toward recovery, after enforced regular sleep, antiseptic catharsis and right feeding and they have been as much helped sometimes, by calling their attention to certain other patients at opportune times as by the diversions of the chapel, ball room, the magic lantern, the biograph, the theatre, the concerts or walk, gymnasium, billiards, bowling alley or the other games, diversions and occupations of the institution.

Excluding an insanoid or a completely insane person, as is done in some places unless too dangerous to be at large, is dangerous to the community or self. The so-called harmless insane at large is often a wrong to the rights of cure of a citizen who has become mentally maimed, even though but mildly, in the battle of life, and such insanoids as act outrageously or annoyingly to their friends and families, especially when under the influence of drink, should be taken into custody and remedially cared for with a view to the cure and reformation, they are unable to accomplish of themselves, because of their morbidly weak self-volition. They should be cared for, for their own good as well as to relieve their families, friends and the public from their annoyance. They should have the right to legal guardianship and hospital commitment as insanoid and not be kept out till so patently insane that any novice might make a diagnosis of insanity. And they should be cared for in an annex to a hospital for insane where they could be regularly instructed by object lessons of the terrible examples of extremest cases of morbid impulses unbridled and psychiatrically enforce systematic sleep, rest, exercise and proper food and environment for their restoration should be secured to them.

Physicians should know the tendency of these bizarre acting insanoids toward fully developed insanity and be able to counsel and conduct the right treatment, medicinal and institutional. The neurologist and alienist should not be ignored in their early management.

These are the unfortunate creatures who should by right repressive, chemical and sociological restraint and regulative treatment of their brains and the normal regulation through life of all physiological functions, especially of the gastric, hepatic, intestinal and nervous, be kept in the best state of normal mental and bodily tranquility. Boys and youths like Harry Kendall Thaw, treated in this way from childhood into manhood with right moral precepts added, would escape the life calamity of psychic neurone instability which has befallen him and ruined and destroyed his own and other lives.

The world is full of such unstable, erratic, neglected neuropaths, destined, without diversion, to develop into paranoia, folie circulaire, melancholia, dementia praecox, etc., etc.

Let this subject be made a little clearer by repetition, viz.: In suggesting an insane hospital annex for the insanoids or semi-fous my purpose is to give to this class of neurotics tending to a profounder psychopathy, an opportunity not only for right restraint of self-will-power regulation of conduct and speech and for reform, but a chance for instruction in the object lesson of seeing others who have reached the extreme of untrained psychic inhibitions over wrong propensities and passions. The examples of the extreme forms of mental aberration should be used as daily object lessons for the semi-insane and semi-responsible, to be avoided. The semi-insane are really sick people to be cared for, as Grasset justly maintains, especially in their earlier lives. But contrary to the opinion of Grasset, it is here maintained that in their earlier lives they should be restrained and regulated in an institution lawfully made easy of access where they may see whither they are tending and helped to avoid the calamity impending, through knowledge and a cultivated greater restraint over themselves to avoid the calamity of confirmed complete insanity.

To Grasset's question "what ought to be the attitude of society—what their duties and rights toward them?" we would answer: Help them to regulate themselves by means of better trained inhibitions and better knowledge of them-

selves and to know whither they are tending and how to arrest the grave psychic calamities impending, by revealing to them their true neurotic, neuropathic and psychopathic condition, because the semi-insane are harmful to themselves, to their fellows, to society and to their descendents. This should be done by housing, segregation etc., and in certain cases asexualization. The geniture of the gravely degenerate, Ada Juke immediate descendants should have been prevented, before the mischievous hundreds of her degraded, degenerate brood had had chance to go forth to their miserable existence. In Grasset's own words "they are particularly detrimental to their neighbors and to society when they marry and establish a family by bearing and bringing up children."

This is more harmful than all of their misdemeanors, for their offspring are likely to imitate or go beyond them in psychic aberrations of conduct. It is fortunate when a finality is reached, as in Morel's record, in family extinction.

Our full preventive duty is obvious, but society is not yet prepared to discharge it. But it must be. The swelling stream of neuropathy and psychopathy must be turned from abnormal courses and reduced in volume. The vicious blood stream that flows and nourishes erratic psychic neurones toward the gulf of insanity must be averted or checked by a scientific, intelligent philanthropy, the diffusion of knowledge and the prevention of psychopathic progency.

SLEEP STATES.*

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SLEEP states meriting medico-psychologic attention are dreams, somnolentia, somnambulism, pavor nocturnus and their survival in waking consciousness.

These consist essentially of a suggestibility analogous to hypnotism together very often with a state closely allied to the results of hypnotic suggestion. The emotional state proceeding from suggestion is less complex and less intense than that proceeding from dreams. The relation of pavor nocturnus to later terrifying dreams is intimate, but survivals of this condition are not studied as such.

This survives from primitive man who regarded his dreams as actual occurrences. Since terror of the unknown hangs over the savage adult as over the untrained child, terror plays a large part in the psychology of dreams and sleep states. This led primitive man with his fetichic tendency to regard all occurrences from an anthropopathic point of view, to accept dreams as communications from spirits of like nature with himself. This belief evolved into the mythologic Morpheus who presided over sleep and whose dream communications if true, passed out of his horn gate or if untrue, passed through his ivory gate. Fetichic belief in dreams still dominates large masses of people

*Read before the Chicago Academy of Medicine, January, 1907.

theoretically under nineteenth century culture, as witness the profits from dream books.

In sleep states inhibition not only is disordered but the judgment is perverted. High minded, honorable men do not scruple during sleep to commit most atrocious crimes or regard with complacency actions which in waking moments would fill them with horror. The secondary ego so slowly acquired by the race is through the removal of inhibitions by the circulatory conditions of sleep, distorted. The individual views everything from the egoistic standpoint of primitive man. For this reason dream judgments are so fallacious. As a rule in the ordinarily healthy individual, these judgments do not persist in waking moments, still under fatigue, emotional strain, general illness, *néurasthenia*, hysteria or defective childhood training, such judgments sometimes remain as delusional memories. Terror of the unknown which plays such havoc with the mentality of seemingly otherwise bright adults is largely due to an objective semblance given products of dream actions during the waking moments by such memory delusions. Occultism shown by adherents of Dowie, of the Eddy-cult, of the "spirit fruit" fanatics, spiritualists and clairvoyants, etc., often then arises from delusional memories of sleep states regarded as experiences and judgments without reference to their source.

Sleep states have not medically received the attention their clinical and forensic aspects merit. Their pathology, physiology and psychology are destitute of the wierd or occult which so attracts the unduly credulous and repels the crudely materialistic. The older clinicians attached medical and forensic significance to dreams and sleep states which the later gross lesionists ignore. Dreams and sleep states include dreams proper, their survivals in waking consciousness, *somnolentia*, *somnambulism* and night terrors of children. The dream is a much more potent factor in waking consciousness than is usually assumed by the crude experimental psychologist.

The mental state of sleep states is practically identical with that of fatigue, exhaustion, grief and other mental shocks, *neurasthenia*, hypnotism, epilepsy, insanity, etc. Disturbances of the coordination constituting the "ego" occur. The "ego"

oscillates between perfect unity, absolute incoordination, and the intermediate degrees, without line of demarcation between normal and abnormal, health and disease, the one trenching upon the other, or else it ceases to be. The "ego" is the cohesion for a given time of clear states of consciousness, accompanied by others less clear and by physiologic states which, though not entering into consciousness, are even more effective than the conscious states.

Certain cortical areas exclusively connected with associating tracts have little if any direct connection with the bodily periphery. Such cortical areas and subsidiary associating tracts, bound into the higher unity of the cerebral hemispheres, constitute the material substratum of the "ego". Disturbance of the intricate relations involved in this is necessarily accompanied by disturbance of the "ego," or may render an "ego" impossible. On accurate connection of projection areas (passing outward to the periphery) with projection areas, and of these with "abstraction" areas, the faculty of logical correlation depends. Correction of the countless errors made during a lifetime is possible only by inhibitions, exercised by the association fasciculi. Correction with approaching maturity is delegated to the "abstraction" field, whose functions are ordinarily performed in an automatic manner.

In sleep the associations constituting automatism are broken up. The individual then becomes actively conscious of the necessity of controlling conceptions constantly received from sense impressions. The factor assumed to secure balance between associations is termed will or volition. This final act of consciousness results from a complex coordination of states conscious, subconscious or unconscious (purely physiologic), finding expression in action or in inhibition. Volition is an effect, not a cause.

This analogizing quasi logic of primitive man has found frequent popular expression by poets, literati and theologians.

We are such stuff
As dreams are made on and our little life
Is rounded by a sleep.

"If", remarked Pascal, "we dreamt every night the same

things, it would perhaps affect us as powerfully as the objects which we perceive every day and if an artisan were certain of dreaming every night for twelve hours that he was king, I am convinced that he would be almost as happy as a king who dreamt for twelve hours that he was an artisan. If we dreamt every night that we were pursued by enemies, and harrassed by horrible phantoms, we should suffer almost as much as if that were true, and we should stand in as great dread of sleep as we should be of waking, had we real cause to apprehend these misfortunes. It is only because dreams are different and inconsistent, that we can say when we awake, that we dreamt, for life is a dream a little less inconsistent."

"The brain" remarks DeQuincey "is a palimpsest—an antique vellum parchment—whereon successive generations recorded their historic events, or the creation of fancy, the legatee erasing, as he vainly thought, the previously-written narrative to make room for his own. The same piece of vellum might thus be made to bear the text of a Greek tragedy, afterward a monastic legend, and finally, written upon both, the story of some medieval romance. But, falling at last into the hands of the first ardent students of chemistry, its written treasures were discovered to be, like the maid in the gospel, not dead but sleeping and a way was soon invented of bringing them to light again. Suitable reagents were applied, when lo—the scrolls, which had so long defied the scrutiny of the keenest eyes, were revealed, sometimes in the order in which they had been long ago written down, but oftener in a state of perplexing confusion and admixture."

The views of De Quincey approximate more the neurologist standpoint as to sleep states. Dreaming according to Benjamin Rush* "is a transient paroxysm of delirium. Somnambulism is nothing but a higher grade of the same disease. It is a transient paroxysm of madness. Like madness, it is accompanied with muscular action, with incoherent or coherent conduct, and with that complete oblivion of both which takes place in the worst grade of madness. Coherence of conduct discovers itself in persons who are affected with it undertaking or resuming certain habitual exercises or employments. The

*The Mind.

scholar resuming his studies, the poet his pen, and the artisan his labors, while under its influences, with their usual industry, taste, and correctness. Dr. Blacklock, of Edinburgh, rose from his bed, came into the room where his family were assembled, conversed with them, and afterwards entertained them with a pleasant song, without anyone suspecting he was asleep, and without his retaining after he awoke the least recollection of what he had done.

Besides foundation of dreams upon circumstances which have happened during waking moments, Hammored remarks, they may arise, from impressions made upon the mind during sleep, sensations may be so intense as to be partially appreciated by the brain, and yet not strong enough to cause sleep to be interrupted. In such cases the imagination seizes the imperfect perception and weaves it into a tissue of incongruous fancies, which however, generally bear a more or less definite relation to the character of the sensorial impression.

In dreaming, remark Wharton and Stillé, as in certain forms of mental disorder, phases of intellectual vigor and states of mental acuteness are developed which were not normal manifestations during the waking hours, and did not exist in conditions of healthy thought. The most exquisite creations of the poetic fancy have been engendered under these circumstances, and conceptions suggested to the dreamy consciousness which have paved the road to fame and fortune. During the hours of sleep the intellect has, with rapid facility, solved subtle questions which puzzled and perplexed the mind when in full and unfettered exercise of its waking faculties. Difficult mathematical problems, knotty and disputed questions in the science of morals, abstruse points of philosophy, have, according to accredited testimony, found their right solution during the solemn darkness of night and periods of profound sleep. "Strictly speaking," as Rosenkrantz remarks, "intellectual problems are not solved in dreams, because intense thought is without images, whereas dreaming is a creation of images. I perfectly recollect having dreamt of such problems, and, being happy in their solution, endeavored to retain them in my memory. I succeeded, but on awaking discovered that they were quite unmeaning, and could only have imposed upon a sleeping imagination."

In dreaming, the mind, according to W. A. Hammond,* is occupied with the incongruous conceptions and fantastic combinations of images, characteristic of many conditions of disordered intellect. There is incoherence of the ideas, one conception following another, this succeeded rapidly by a series of mental impressions, in opposition to all the acknowledged laws governing associated thought. There is a complete paralysis of the will over subjective phenomena, this faculty exercising no controlling influence upon the train of suggested ideas. In dreaming, the most trivial circumstances give a decided character and direction to the current of thought. The application of a bottle of hot water to the feet of a person while sleeping, has given origin to the impression, that he was walking on the crater of a volcano; and upon a blister being applied to the head, it suggested to the person an idea that he was scalped by Indians. Any sudden noise, occurring in the immediate neighborhood, or within hearing of the dreamer, will in many cases originate in the mind an idea of being exposed to the crushing effect of a terrible avalanche, or suggest the notion that he is wandering over some dreary moor, during a fearful hurricane. In a dream that has not continued beyond a minute, or even a second, the events of a long and chequered life have in their minutest relation occurred to the mind, and in the smallest appreciable period of time, and eventful history, full of remarkable incidents, has to the imagination of the dreamer been elaborated.

The rapidity of mental action, occurring in dreams, where events, which in their actual development would occupy hours, days nay, even years, are compressed and comprehended sometimes in a few minutes, or even seconds, is finely illustrated in the dream of Count Lavalette. "One night," he says, "while I was asleep, the clock of Palais de Justice struck twelve and awoke me. I heard the gate open to relieve the sentry, but I fell asleep again immediately. In this sleep I dreamed that I was standing in the Rue St. Honore, at the corner of Rue de l'Echelle. A melancholy darkness spread

*Hammond op. cit.

around; all was still, nevertheless, a low and uncertain sound soon arose. All of a sudden I perceived, at the bottom of the street, and advancing towards me, a troop of cavalry; the men and horses, however, all flayed. The men held torches in their hands, the flames of which illuminated faces without skin, and with bloody muscles. Their hollow eyes rolled in their large sockets, their mouths open from ear to ear, and helmets of hanging flesh covered their hideous heads. The horses dragged along their own skins in the kennels, which overflowed with blood on both sides. Pale and dishevelled women appeared and disappeared alternately at the windows in dismal silence; low, inarticulate groans filled the air, and I remained in the street alone, petrified with horror, and deprived of strength sufficient to seek my safety in flight. This horrible troop continued passing in full gallop, and casting frightful looks at me. Their march, I thought, continued for five hours, and they were followed by an immense number of artillery wagons, full of bleeding corpses, whose limbs still choked me. At length the iron gate of the prison, shutting with great force, awoke me again. I made my repeater strike; it was little more than midnight, so that the horrible phantasmagoria had lasted no longer than ten minutes; that is to say, the time necessary for relieving the sentry and shutting the gate. The cold was severe, and the watchword short. The next day the turnkey confirmed my calculations. I, nevertheless, do not remember one single event in my life the duration of which I have been able more exactly to calculate.

Sense and organ impressions are during sleep rapidly transmitted into delusional illusions. This was shown by Maury,* the physiologist, over fifty years back. Tickling his nose with a feather caused him to dream that a pitch-plaster, which he imagined to have been put upon his face, was violently withdrawn, giving him acute pain. A tweezers sounded close to his ear gave him a dream of the ringing of church-bells, and, by suggestion, the sound of the tocsin with images of the political events of June, 1848. Eau de Cologne held to his nostrils made him dream of a perfumer's shop in Cairo,

† Du Sommeil.

Egypt, in which he had formerly been. A few drops of water sprinkled on his brow suggested a vision of Italy, a sensation of great thirst, and a cooling draught of Orvieto. A red light carried before his closed eyes gave him a dream of storm and lightning, suggesting also recollections of a tempest. In a case reported by J. J. O'Dea, a physician slept in a cheese store over night. A barrel of strong old American cheese had been recently unpacked. Its odor had strongly impregnated his room. In addition to this annoyance, just as he began to be very drowsy, he was disturbed by rats gnawing in the wall at bed's head. He at length fell asleep, and dreamed that he was in a savage country, on account of a crime condemned to imprisonment in a huge cheese. Here he suffered from the stifling stench. He had not long been a prisoner when a legion of rats attacked the cheese. At it they went, tearing away with their terrible teeth until they pierced its wall, and were gnawing at his flesh. In the midst of his agony he awoke to find it a dream, but at the same time was nauseated by cheese stench.

Mental training of the dreamer plays a large part in the dream. Hitschmann, who became blind at 3 but distinguished between light and darkness, states that he never dreams of seeing and does not share the fancy of poets that the spirit freed during sleep from bodily restraint can realize the gift of sight. The blind in general have weaned themselves from their deficiency and feel themselves in an accustomed natural condition. They have not that painful longing for light which is poetically ascribed to them. Naturally their dreams are compounded of the other sensations, especially the impressions of hearing. The blind dream much of voices by which the persons of their acquaintance are recognized, whereas the seeing often dream of faces and figures. Sometimes animals, especially dogs and birds, seem to the sightless to have human voices and to be gifted with speech. A blind man who traveled home once a year used to dream of the journey by rail. In this case the dreams were made up of rumbling wheels, whistle of the locomotive, feeling of fresh air through the open windows and the smell of food sold at the station. While the dream

world of the blind is poor in sensory images, it is rich in abstract phenomena. The sleeper often feels himself a spectator as if he witnessed a theater play. He seems to witness novels, dramas, or philosophical lectures. He never dreams of handling books for the blind or of using his writing apparatus. Seeing people seldom dream of reading and scarcely ever of writing.

Sleep in criminals according to Despine is calm while Lombroso found it much disturbed by dreams. Dostoweffsky found that talking and gesticulating was frequent. Ferri found that the insane murderer slept after his deed like an epileptic while the born (?) murderer slept like a workman after his days labor. Sancto de Sanctis examining into the sleep of 125 criminals, of these 29 often, 64 seldom and 32 never dreamt. There were 24 women; of these 7 often, 14 seldom and 3 never dreamt. The neurotic subjects dreamt less often. In de Sanctis' opinion prison idleness, desire of liberty and perhaps nutritive states reinforce the mental activities of sleep. Among the worst criminals the greatest proportion of non-dreamers was found. The emotional dreams dealt with quarrels, falls from a height, persecutions, fearful visions, often mystical and frequently concerned with the sexual sphere.

The dreams concerning the crime which led to the imprisonment were emotional in the majority of men and unemotional in the majority of women. The bloodshedder during the nights following the deed and during imprisonment sleeps quiet and deeply unless special causes interfere. The habitual sleep of criminals resembles that of old epileptics and imbeciles.†

The impulses of neurasthenia and of allied psychopathic and neuropathic states often appear first during sleep and recur with peculiar persistence to form the basis of delusions or to dominate an unstable consciousness. It is possible, for this reason, to elicit delusions in the insane who are dissimulating by asking about dreams which sets up a train of thought leading them to expose delusion. Very often also, it is likewise possible thus to elicit the obsessions of timid neurasthenics who dread lest these should show them to be insane and for that reason conceal them from their physicians.

† Havelock Ellis: *The Criminal*.

These last states and certain unsystematized delusions too may be removed by securing restful, dreamless sleep. This prevents the recurrence of dream states tending to obtrusion upon wakeful consciousness and thereby to persistence. A homicidal impulse first appearing during a dream has recurred during consciousness and conditions being favorable, has been carried out. Cardiac, pulmonary and other circulatory disturbances moreover create during sleep suspicious states which do not always disappear upon awakening.

Morbid and pathologic dreams are divided by Macario into three classes: The prodromic, or those which precede diseases; the symptomatic, or those which occur in the course of diseases, and the essential, or those which constitute the main features of disease. The first two are probably identical. Diseases are sometimes preceded by dreams which indicate, more or less exactly, an approaching morbid condition. Galen had a patient, who dreaming that his leg had become converted into stone, was soon afterward paralyzed in that member. Conrad Gasner dreamed that he was bitten in the left side by a venomous serpent. In a short time a severe carbuncle appeared on the identical spot and death ensued in five days. M. Teste, dreamed three days before his death that he had an attack of apoplexy. Three days afterward he died suddenly of that disease. A young woman saw in a dream objects apparently confused and dim, as through a thin cloud, and was immediately thereafter attacked with amblyopia, and threatened with loss of sight. Here hysteria cannot be excluded. A woman, under care of Macario, dreamed, at the menstrual flow, that she spoke to a man who could not answer her because he was dumb. On awakening, she discovered she had lost her voice. Hysterical possibilities are again suggested. Macario dreamed he had a severe pain in his throat. On awakening, he felt very well, but a few hours subsequently was attacked with severe tonsillitis. Arnold, of Villanuova, dreamed that a black cat bit him in the side. The next day a carbuncle appeared on the part bitten. Forbes Winslow* cites several similar instances. A patient, for several

*Obscure Diseases of the Brain.

weeks before an attack of apoplexy, had frightful dreams; in one he was scalped by Indians. Others dreamt of falling down precipices, and of being torn to pieces by wild beasts. One gentleman dreamt that his house was in flames, and that he was gradually being consumed to a cinder, a few days before an attack of inflammation of the brain. An epileptic prior to an attack dreamt that he was severely lacerated by a tiger. Another epileptic just before a seizure, dreamt that he was attacked by murderers, and that they were knocking out his brains with a hammer. A barrister, several years before an attack of cerebral paralysis, awoke daily in great alarm and terror without being able to discover the reason for his apprehension. Beddoes attended an epileptic whose first fit succeeded a dream of being crushed by an avalanche. Gratiolet cites the case of a man, who going to bed in good health, toward the midnight dreamed of a man affected with the plague and entirely naked, who attacked him with fury, threw him to the ground after a severe contest, and, holding him between his thighs, vomited into his mouth. Three days afterward he was seized with the bubonic plague and died. Gunther cites a case in which a woman dreamt that she was being flogged with a whip. On awakening she had marks on her body resembling the scars made by a lash. Here hysteria stigmata are suggested. Diseases of the heart and larger vessels are often first revealed by frightful dreams when there is no other evidence of their presence. Macario cites the case of a woman in whom violent cardiac palpitations were preceded by painful dreams. She subsequently died of cardiac disease. Moreau† (de la Sarthe) reports the case of a French nobleman, treated during several months for pericarditis, threatening chronicity, who was tormented every night by painful and frightful dreams. These dreams, giving the earliest indication of the cardiac state, excited fears as to the result, which were soon verified. In another case periodical hemorrhages were preceded by morbid dreams. A physician had, in his youth, been subject to periodical hemorrhages preceded by dreams or other trouble during sleep. As he advanced in years the hemorrhages were not so frequent, but

†*Sur la Reve.*

were always preceded by a condition of general irritation, characterized during wakefulness by heat of skin and frequency of the pulse, and during sleep by painful dreams. These dreams chiefly dealt with giving and receiving heavy blows, walking on a volcano, or being precipitated into lakes of fire.

Many psychoses are preceded by frightful dreams, as Hammond points out. Falret, in calling attention to the analogy between insanity and dreams, finds that insanity is often preceded by significant dreams, which constitute the whole essence of the disorder by becoming firmly fixed in the patient's mind. Odier, of Geneva, was consulted by a lady, who the night preceding the outbreak of her insanity, dreamt her step-mother came with a dagger to kill her. This dream made so strong an impression upon her that she ultimately accredited it as true, and thus became the victim of an insane delusion. Numerous similar instances have come under Falret's observation. He reports the case of a young lady, subject to periodical insanity, whose paroxysms were always preceded by notable dreams.

Morel found that many patients ere becoming insane, had frightful dreams, which they regard as evidences that they are about to lose their reason. Sometimes they are afraid to go to sleep on account of the terrifying apparitions which then visit them.

Forbes Winslow cites the case of "a gentleman, who had previously manifested no appreciable symptoms of mental disorder or even of disturbed and anxious thought, retired to bed apparently in a sane state of mind. Upon arising in the morning he was found to be insane. He asserted that he was going to be tried for an offence he could not clearly define; during the previous night he had nightmare in which delusional elements were clearly evident to his wife. In another case, a confusional hallucinatory state was preceded by a dream of hell which, persisting on waking, evolved the hallucinatory state. Dreams, according to Albers, are of prognostic significance at times. Lively dreams are in general an expression of emotional exaltation. Frightful dreams indicate stress of the cerebral circulation. Dreams of fire in women indicate impending hemorrhages; dreams of blood and red objects

indicate inflammatory conditions. Dreams of rain and water indicate mucous membrane disease and dropsy. Dreams of distorted forms frequently indicate hepatic disturbance and hepatic disease. The connection of ophthalmic migraine with this type of dreams must be at once apparent. Dreams indicating injury or affecting a special part of the body often precede disease of that part. Here circulatory and nerve disturbances not apparent during consciousness have become evident during sleep. Dreams of death often precede apoplexy. Nightmare frequently indicates cardiac or pulmonary disorder. This is peculiarly apparent in the night terrors of children where the disorder or uninhibited action of the heart and disorder of the respiratory centers rise into consciousness with such force during sleep as to persist after waking, despite the inhibitory influence of soothing and reassurance. The onset of intermittent and yellow fever has naturally for the like reason been often preceded by terrifying dreams. Neuralgic states so often connected with suboxidation frequently make their onset with terrifying dreams.

The anxiety mental states and psychoses are very frequently preceded by cardiac disturbances with dreams during sleep, the cardiac disturbances and resultant anxiety persisting on awakening, although the dream be lost. Sometimes the erythema of autotoxic neurasthenia and congenital metabolic defect appears during sleep, suggesting dreams with objective remainders. During sleep the inhibitory powers of the forebrain are weakened, whence the increased suggestion from peripheral sensations.

The influence of the erythenatous states in producing constitutional effects likely to influence or produce dreams, is much underestimated.

These relations have been pointed out by Dr. W. L. Baum, in a paper read before the Chicago Academy of Medicine. Erythemata* furnish potent indications of constitutional disease.

Severe, though simple, erythemata are indications of serious nutrition disturbances of gravest prognostic significance. The simplest erythema may pass on to true exudative lesion.

*Practical Medicine, Ser. X, 1904.

It is difficult to decide whether the symptomatic erythemata of contagious diseases belong to simple or exudative types. Pigmentation and desquamation are proofs of exudation. Tachycardia, if there be much diminution in the peripheral vascular tension, is the commonest association of simple erythema. Dilation of dermic arterioles over a large area is necessary. The individual with congested extremities often has a less frequent normal heart beat. Where congestion is marked, tissues are apt to be ill nourished and edematous, traumatism produces unusually severe results and tissue resistance to pathogenic germs is less. Chillblain results not from vasodilatation of central origin, but from the action of cold on the vasomotor nerves, producing paralytic distention. Erythema induratum is due to causes interfering with arteriole nerve equilibrium. Vaso-motor ataxia† underlies these states and furnishes potent predisposition to the erythemata and their associations, especially the vaso-motor disturbance and vaso-motor paralysis.

Erythema includes simple erythema, erythema exudativum, herpes iris, erythema nodosum, certain purpures, urticaria, and angioneurotic edema. The essential process is a vascular change with exudate of blood or serum, alone or combined. The dermatoses belong to one family, characterized by the similar conditions under which they occur; the frequency with which the lesions are substituted the one for the other in the same long period of years, and, the identity of the visceral manifestations. The erythema group has a varied etiology. Urticaria of cholelithiasis, of ague, of shell-fish, strawberries, hydatids, and that associated with asthma, has the same features, though due to different toxic products. The toxic product is of less intrinsic importance than transient aspects of cell metabolism on which it acts. The same poison has not a constant action on all persons or in the same person at different times. This is particularly the case with animal and vegetable substances causing urticaria. Morbid persistent sensitiveness exists in dermic vessels to poisons of intestinal or tissue origin. Here occur all the factors so potent in etiology. The importance of local status is especially evident in

†*Alienist and Neurologist*, 1886.

urticaria from cold. So long as the face is above 60° F. the patient is all right, exposure to 40° F. is immediately followed by urticaria. Angioneurotic edema (Bannister's giant urticaria) originates in morbid tissue susceptibility or inherited metabolic peculiarity or both combined. Erythema visceral crises may be taken for appendicitis or intususception demanding operation. In one instance renal colic was diagnosed; in another appendicitis, but the skin rash was noticed and the pain subsided. In two cases of G. A. Sutherland,† association of colic with bowel hemorrhage led to diagnosis of intususception. In another laparotomy was done. In one of Osler's cases visceral crises were associated with nephritis and arthritis. In some cases brain symptoms occur, active delirium, aphasia and hemiplegia at the recurrent attacks. The cerebral and dermic manifestations may persist for years. Severe dyspnea, croupy attacks and pneumonia occur. Acute endocarditis rarely occurs. Nephritis is comparatively frequent and may be complicated by hematuria. Arthritis or arthritic pain is relatively common. Erythema, purpura, multiple arthritis, abdominal colic, bowel hemorrhage and nephritis followed by recovery are reported by D. J. M. Miller, in a ten-year-old girl who had had measles, varicella, pertussis and tonsilitis. With the pertussis, baccal, nasal, and aural hemorrhage occurred. The tonsilitis was followed by pain in the hands and feet. The last attack made its onset with chill, headache, and sore throat, followed by nausea and vomiting. Swelling and redness of the wrists, hands and ankles then appeared, followed by the state before mentioned.

Recurring membranous stomatitis with erythema exudativum muliforme is reported by L. E. Blair, in a twelve-year-old boy who had six attacks. The stomatitis appeared from four to six days ere the onset of the erythema. Desquamation was severe on the face, hands and feet and abdomen. Eight months later purple discoloration marked seat of the eruption. Red blotches occurred on violent exercise.

Urticaria from eggs repeatedly occurred in a mother and daughter, described by R. Bendix, no matter which part of the

†*Chicago Medical Review*, 1880.

egg was eaten. Renal susceptibility to eggs has long been recognized. In actual renal disorder consequent on fecal resorption and on the exanthmata, eggs exert a toxic effect. A. P. Brown reports the case of a young lady who vomited if she ate the smallest particle of an egg. J. R. Clemens observed the case of a fourteen-month-old child, recovering from pertussis, who was suddenly attacked with acute urticaria and alarming collapse. The face and ears were greatly swollen. The radial pulse was absent from the wrist. Prior to the attack white of an egg had been eaten. Two weeks later an identical attack followed its use. A month later, on eating custard, an acute attack of facial and aural urticaria with vomiting and purging resulted. Three weeks afterward on eating ginger bread, in which eggs had been used, the child limped. The feet were extremely swollen. Purpuric, petecial and ecchymotic spots extended to the middle of the legs. The kidneys were seemingly sound. Each attack was preceded by pale stools, fatulence, flabby muscles, broken sleep and decided indicanuria. J. M. Miller has observed a three and a half-year-old child who from the age of twelve months had severe vomiting, prostration and great pallor from eating eggs. The earliest to call attention to toxic effects of eggs was Marcellus Donatus. His case was that of a young man who could not eat eggs without his lips swelling and purple spots appearing on his face. Jonathan and Robert Hutchinson have observed several cases in which dermic and gastrointestinal symptoms were such as to create suspicion of poison. Morell Mackenzie observed such untoward effect produced by eggs in four generations. The use of eggs without knowledge of the patients caused the throat to become constricted and painful, the eyes swollen and wild, the face crimson and great uneasiness and restlessness.

From the conditions just outlined it is obvious that the erythemas making their onset during sleep would occasion startlingly vivid dreams with consequences persisting during waking consciousness. A migrainous neurotic man had a very vivid dream of having been in a field clad only in a pair of trousers with his back exposed to the blazing sun. Severe sunburn resulted and he fell exhausted to awaken with a pain-

ful erythema covering his back. In another case, likewise in a lithemic neuropathic individual subject to ophthalmic migraine, a dream of having bent over a diphtheria patient who coughed into his mouth was followed by angio-neurotic edema of the fauces. A neuropathic woman who had been widowed for about a year and suffered from erythism at times had renal insufficiency. For this reason eggs were prohibited. One night after partaking rather freely of hard-boiled eggs she had a very vivid dream of having been repeatedly violated by male friends in a way that first caused enjoyment. No pain was felt until the last violation when a largely developed penis seemed to have torn her extremely. The dream persisted for some time after waking. The labia were the seat of an intense erythema and the vagina was covered with urticaria. This condition soon disappeared, but a persistent leucorrhoea followed which yielded finally to local treatment.

In the case of a married migrainous neuropath, whose husband had been away for months a dream of having been violated by the devil whose very scaly organ caused considerable irritation, followed however by an intense enjoyment, but succeeded by a protracted generalized urticaria. The labia and vagina were, as in the preceding case, the seat of intense erythema and urticaria and the condition was likewise followed by leucorrhoea. These last cases indicate a possible source of certain strongly emphasized hysteric accusations given with great detail and seeming vraisemblance. Such accusations repeatedly underlie charges of assault upon women which have roused the neighborhood and caused homicide by the unwritten law so much eulogized in the south.

Sleep-drunkenness is the lapping over of a profound sleep in the domain of apparent wakefulness producing an involuntary intoxication on the part of the patient, which destroys at the time his moral agency. Under the title of somnolentia, given it by Ploucquet and subsequent French writers, and of *Schlaftrunkenheit*, as it is styled by the German school, it became the subject of general discussion at the beginning of the nineteenth century. The first case reported

was that of Buchner. A sentry, who had fallen asleep during his watch, being suddenly aroused by the officer in command, fell upon the latter with his drawn sword, with an attack so furious that the most serious consequences were only averted by the interposition of bystanders. The result of the medical examination was, that the act was involuntary and irresponsible, being the result of a violent confusion of mind consequent upon the sudden involuntary waking from a profound sleep. Shortly afterwards occurred the case of a day-laborer who killed his wife with a wagon tire, the blow being struck immediately upon his starting up from a deep sleep, from which he was forcibly awakened. In this case there was evidence that the defendant had when awakening a delusion that a "woman in white" had snatched his wife from his side and was carrying her away, and that his agony of mind was so great that his whole body was wet with perspiration. There was no doubt of the defendant's irresponsibility. In England, the case properly would fall under the head of excusable homicide by misadventure. These cases vary little from an early English case, in which no psychologic defence was made, although proof existed of delusions as to danger heightened by the disturbances of mind produced by a sudden waking up from a deep sleep. The defendant, being in bed and asleep in his house, his maid who had hired the deceased to help her do her work, when going to let the latter out about midnight, thought she heard thieves breaking open the door, upon which she ran upstairs to the defendant, her master, and informed him thereof. Suddenly aroused, he sprang from his bed, and, running down stairs with his sword drawn, the deceased hid herself in the buttry, lest she should be discovered. The defendant's wife observing some person there, and not knowing her, but conceiving she was a thief, cried out, "here are they who would undo us!" And the defendant, in the paroxysm of the moment, dashing into the buttry, thrust his sword at the deceased and killed her. The defendant was acquitted under the express instructions of the court. The case has stood the test of the common law courts for over two hundred years, during which it has never been questioned. It is important to observe, however, that if it differs from the

two cases already noticed under this head, in the increased naturalness of the delusion under which the defendant was laboring, it differs from them in the comparatively longer interval in which his perceptive faculties had the opportunity to arrange themselves. Let it be supposed that it was the wife, and not the husband, who had slain the deceased. Under the circumstances, the result would hardly have been different, and yet in this case the distinction between her responsibility and that of the laborer who killed his wife on the awakening spasm is simply in the degree of probability of delusions which in both cases were unfounded. If in the one case this improbability was more glaring, there was much less time afforded to the patient to compose himself to a reasoning state of mind.

A young man about twenty years of age was living with his parents in great apparent harmony, his father and himself being alike distinguished for their extravagant devotion to hunting. In consequence of the danger of nocturnal attacks, they were in the habit of taking their arms with them into their chamber. On the afternoon of September 1st, 1839, the father and son having just returned from hunting, their danger became the subject of particular conversation. The next day the hunting was repeated, and on their return, after taking supper with the usual appearance of harmony, the family retired about ten o'clock, the father and mother occupying one apartment, and the son the next, both father and son taking their loaded arms with them to bed. At one o'clock, the father got up to go into the entry, upon which the son instantly sprang up, and, discharging his gun at the father, gave the latter a fatal wound in the breast, crying at the same time, "Dog, what do you want here?" The father fell immediately to the ground, and the son, then first recognizing him, sank on the floor crying, "O Jesus—it is my father." The evidence was, that the whole family were subject to great restlessness in their sleep. The defendant in particular was easily distressed by dreams, which lasted for about five minutes on waking, before their effect was entirely dissipated. His own version of the affair was, "I must have fired the gun in my sleep; it was moonshine, and we were accustomed to

talk and walk in our sleep. I recollect hearing something jar; I jumped up, seized my gun, and shot where I heard the noise. I recollect seeing nothing, nor am I conscious of having spoken. The night was so bright that everything could have been seen, I must have been under the delusion that thieves had broken in." The concurrent opinions of the medical experts examined on the trial were, that the act was committed in a state of somnolentia or sleep-drunkenness, and that it was not that of a free and responsible agent. It is important to distinguish somnolentia, or sleep-drunkenness, which is a state that to a greater or less extent is incidental to every individual, from somnambulism, which is an abnormal condition incident to a very few. The experience of every day life demonstrates how much the former enters into almost every relation. Children, particularly, sometimes struggle convulsively in the effort to wake up, which often is continued for several minutes. The very exclamations, "Wake up"—"Come to"—which are so common in addressing persons in the waking condition, are scarcely necessary to bring to the mind many recollections of cases where the waking struggle has been peculiarly protracted. Of course there are constitutions in which the tendency to sleeplessness is equally marked. Krugrelstein reports a merchant who had an irrepressible tendency to sleep in the afternoons, and yet who, whenever he was wakened up, was for a few minutes overcome with a paroxysm, over which he had no control. Dr. Meister relates the following: "I was obliged to take a journey of eight miles on a very hot summer's day, my seat being with back to the horses, and the sun directly in my face. On reaching the place of destination, and being very weary and with a slight headache, I lay down with my clothes on, on a couch. I fell at once asleep, my head having slipped under the back of the settee. My sleep was deep, and, as far as I can recollect, without dreams. When it became dark the lady of the house came with a light into the room. I suddenly awoke, but for the first time in my life, without collecting myself. I was seized with a sudden agony of mind, and picturing the object which was entering the room as a spectre, I sprang up and seized a stool, which, in my terror, I would have thrown at

the supposed shade. Fortunately, I was recalled to consciousness by the firmness and tact of the lady herself, who, with the greatest presence of mind, succeeded in composing my attention until I was entirely awakened."

The existence of this intermediate state between sleeping and waking, and of the "drunkenness" by which it is sometimes accompanied is recognized by even the older elementary writers.

Taylor reports the case of a peddler, in the habit of walking about the country armed with a sword-stick, who was awakened one evening, while lying asleep on the high-road, by a man who was accidentally passing, seizing him and shaking him by the shoulders. The peddler suddenly awoke, drew his sword and stabbed the man, who afterwards died. He was tried for manslaughter. His irresponsibility was strongly urged by his counsel, on the ground that he could not have been conscious of an act perpetrated in a half-waking state. This was strengthened by the opinion of the medical witness. The prisoner was, however, found guilty. Under such circumstances, remark Wharton and Stillé, an idea had probably arisen in the prisoner's mind that he had been attacked by robbers, and therefore stabbed the man in self-defence.

Hartshorne reports a similar case in Philadelphia, where a man was shot with a pistol by an acquaintance whom he had suddenly aroused from sleep, late at night, in an open market-house. The plea was, that deceased was mistaken for a robber when the pistol was fired, but the jury found the accused guilty of manslaughter.

The following tests are important in judging responsibility: A general tendency to deep and heavy sleep must be shown, out of which the patient could only be awakened by violent and convulsive effort. Before falling asleep, circumstances must be shown producing disquiet which sleep itself does not entirely compose. The act under examination must have occurred at the time when the defendant was usually accustomed to have been asleep. The cause of the sudden awakening must be shown. It is true that this cannot always happen, as sometimes the start may have come from a violent dream. The act must bear throughout the character of unconsciousness.

The actor himself, when he awakes, is generally amazed at his own deed, and it seems to him almost incredible. Generally speaking, he does not seek to evade responsibility, though there are some unfortunate cases in which the wretchedness of the sudden discovery overcomes the party himself, who seeks to shelter himself from the consequences of a crime of which he was technically, though not morally, guilty.

The etiology of somnambulism has created much discussion. There are two salient points mooted. Is the condition always the expression of an underlying neurosis, or can it arise in a sound constitution under conditions of stress? Another point which has been mooted is, whether there can occur a single or a few attacks of somnambulism, the individual before and thereafter being normal. That somnambulism is frequently an expression of the epileptic constitution is undeniable. Indeed it is often an expression of nocturnal epilepsy whose existence has not been recognized. That it can occur under conditions of stress which predispose to temporary disturbances during waking hours seems also clearly evident. The phenomena accompanying the narcolepsy of nephritis, of diabetes, of puberty lipomatosis, of simple auto-intoxication accompanied or not with systemic exhaustion, demonstrate the possibilities of similar occurrences during sleep whether underlain by the autotoxic state mentioned or not. That it can occur from mental shocks seems also exceedingly probable. Bucknill, however, puts the case rather strongly when he remarks that whether the deep melancholy of remorse often tends to express itself in somnambulism is a fact which may on scientific grounds be doubted. Here, however, he ignores the autotoxic influence of all emotional strain states which would add a predisposing factor to the simple psychic effect of the emotional strain.

Shakespeare's* physician in *Macbeth* expresses the doubt:

"This disease is beyond my practice, yet I have known those who have walked in their sleep, who have died holily in their beds."

The phenomena of sleep walking are here painted with great truthfulness.† In this slumbrous agitation "the bene-

**Mad Folk of Shakespeare.*

†*Macbeth.*

fit of sleep" cannot be received, as the Doctor thinks. It neither exerts its soothing effects on the mind, nor is it "chief nourisher in life's feast" to the body. Light must be left by her continually. Was this to avert the presence of those "sightless substances" once so impiously invoked? She "seems washing her hands," and "continues in this a quarter of an hour." What a comment on her former boast, "a little water clears us of this deed." The panorama of her crime passes before her, searing the eye-balls of fancy—a fancy usually so cold and impassive, but now in agonizing erethism. A wise and virtuous man can "thank God for his happy dreams," in which "the slumber of the body seems to be but the waking of the soul," dreams of which he says "it is the ligation of sense, but the liberty of reason, and our waking conceptions do not match the fancies of our sleep." "There is surely a nearer apprehension of anything that delights us in our dreams than in our waked senses." "Were my memory as faithful as my reason is then fruitful, I would never study but in my dreams; and this time also would I chuse for my devotions," says the morbidly occult Browne† of *Religio Medici* fame. But the converse? Who can tell the torture of bad dreams! Surely, 'tis better in the mind to lie in restless ecstasy, than thus to have the naked fancy stretched upon the rack; all its defences gone, all power of voluntary attention and abstraction, all guidance of the thoughts, all judgment abrogated. What more lurid picture of hell can be formed than that it is one long bad dream?"

"GENTLEWOMAN. Since his majesty went into the field, I have seen her arise from the bed, throw her night-gown upon her, unlock her closet, take forth paper, fold it, write upon it, read it, afterwards seal it, and again return to bed; yet all this while in a most fast sleep.

DOCTOR. A great perturbation in nature, to receive at once the benefit of sleep, and do the effect of watching! In this slumberry agitation, besides her walking and other actual performances, what, at any time, have you heard her say?"

* * *

GENT. Lo you, here she comes! This is her very guise;

†*Religio Medici*.

and, upon my life, fast asleep. Observe her; stand close.

DOCT. How came she by that light?

GENT. Why, it stood by her; she has light by her continually; 'tis her command.

DOCT. You see, her eyes are open.

GENT. Ay, but their sense is shut.

DOCT. What is it she does now? Look, how she rubs her hands.

GENT. It is an accustomed action with her, to seem thus washing her hands: I have known her continue in this a quarter of an hour.

LALY MACBETH. Yet here's a spot.

DOCT. Hark! she speaks: I will set down what comes from her, to satisfy my remembrance the more strongly.

LADY M. Out, damend spot! Out, I say! One: two: why, then 'tis time to do't.—Hell is murky!—Fie, my lord, fie! a soldier and afeard? What need we fear who knows it, when none can call our power to account?—Yet who would have thought the old man to have had so much blood in him.

DOCT. Do you mark that?

LADY M. The thane of Fife had a wife: where is she now? What, will these hands ne'er be clean?—No more o'that, my lord, no more o'that: you mar all with this starting.

DOCT. Go to, go to; you have known what you should not.

GENT. She has spoke what she should not, I am sure of that: heaven knows what she has known.

LADY M. Here's the smell of the blood still: all the perfumes of Arabia will not sweeten this little hand. Oh, oh, oh.

DOCT. What a sigh is there! The heart is sorely charged.

GENT. I would not have such a heart in my bosom for the dignity of the whole body."

The diagnosis arrived at by this judicious and politic Doctor appears to have been, that she was scarcely insane, but so sorely troubled in conscience as to be prone to quiet the anguish of this life by means of suicide.

"Unnatural deeds

Do breed unnatural troubles; infected minds

To their deaf pillows will discharge their secrets:

More needs she the divine than the physician.
God, God forgive us all! Look after her;
Remove from her the means of all annoyance,
And still keep eyes upon her."

A passage at the very end of the drama indicates, though it does not assert, that the fear of the Doctor was realized—"his fiend-like queen,

Who, as 'tis thought, by self and violent hands
Took off her life."

This diagnosis of the Doctor, that actual disease was not present, is again expressed in his interview with Macbeth:

MACB. How does your patient, doctor?

DOCT. Not so sick, my lord,
As she is troubled with thick-coming fancies,
That keep her from rest.

MACB. Cure her of that.

Canst thou not minister to a mind diseased,
Pluck from the memory a rooted sorrow,
Raze out the written troubles of the brain,
And with some sweet oblivious antidote
Cleance the stuff'd bosom of that perilous stuff
Which weighs upon the heart?

DOCT. Therein the patient
Must minister to himself.

MACB. Throw physic to the dogs; I'll none of it.'

This contempt of physic was not ill-founded upon the want of reliance which the Doctor expressed on the resources of his art. In those early times the leech and the mediciner had not learnt to combine the moral influences which are the natural means of ministering to a mind diseased after the manner of Lady Macbeth's, with those sleep producing oblivious antidotes which at present form the remedies of melancholia. Such a patient would not now be given over, either to the divine, or to the unresisted ravages of conscience. What indeed could the divine effect without the aid of the physician? Or, rather, until the physician had done his work? In such a state of nervous system as that of this wretched lady, no judicious divine would attempt to excite religious

emotion; indeed, all thoughts of the world to come would act as fuel to the fire of a conscience so remorseful. The treatment of such a case as that of Lady Macbeth would be, to remove her from all scenes suggesting unhappy thoughts, to attract her attention to new objects of interest, and to find, if possible, some stimulus to healthy emotion. If she had been thrown from her high estate, and compelled to labour for her daily bread, the tangible evils of such a condition would have been, most likely, to have rooted out those of the imagination and of memory. The judicious physician, moreover, would not in such a case have neglected the medicinal remedies at his command, especially those which Macbeth himself seems to indicate, under the title of some sweet oblivious antidote. He would have given the juice of poppy, or some "drowsy syrup," to prevent the thick-coming fancies depriving her of rest. He would thus have replaced the unrefreshing, nay, exhausting sleep of somnambulism, for that condition so beautifully described, earlier in the play, as that which

"knits up the ravell'd sleeve of care,
The death of each day's life, sore labour's bath,
Balm of hurt minds, great nature's second course,
Chief nourisher in life's feast."

Somnambulism involves (1) continuousness, not being merely a transitional momentary state between sleeping and waking; (2) a sort of supersensual or ecstatic consciousness, which enables the patient to find his way with his eyes closed, or with his vision so abnormally excited as to fail to present to him anything more than a certain path, or certain objects on which his attention is absorbed. The latter condition may be defined as that of a state of dreamy abstraction, in which the objects of a dream are exclusively observed and pursued. This is frequently observable in children, who at night, especially when the room is lighted by the moon, will rise from their bed and wander into their mother's room, apparently in a dreamy state, incapable of giving clear answers, and without subsequent waking recollection of having made such a move.

"In this remarkable state," remarks Sir William Hamilton, "the various mental faculties are usually in a higher de-

gree of power than in the natural. The patient has recollections of what he has wholly forgotten. He speaks languages of which, when awake, he remembers not a word. If he uses a vulgar dialect when out of this state, in it he employs only a correct and elegant phraseology. The imagination, the sense of propriety, and the faculty of reasoning, are all in general exalted. The bodily powers are in high activity, and under the complete control of the will; and, it is well known, persons in this state have frequently performed feats, of which, when out of it, they would not even have imagined the possibility. And, what is even more remarkable, the difference of the faculties in the two states seems not confined merely to a difference in degree. For it happens, for example, that a person who has no ear for music when awake, shall, in his somnambulic crisis, sing with the utmost correctness and full enjoyment of his performance. Under this affection persons sometimes lie half their lifetime, alternating between the normal and abnormal states, and performing the ordinary functions of life indifferently in both, with this distinction, that if the patient be dull and doltish when he is said to be awake, he is comparatively alert and intelligent when nominally asleep. I am in possession of three works, written during the crisis by three different somnambulists. Now it is evident that consciousness, and an exalted consciousness, must be allowed in somnambulism. This cannot possibly be denied; but mark what follows. It is the peculiarity of somnambulism—it is the differential quality by which that state is contradistinguished from the state of dreaming—that recollection, when we awake, of what has occurred during its continuance. Consciousness is thus cut in two; memory does not connect the train of consciousness in one state with the train of consciousness in the other. When the patient again relapses into the state of somnambulism, he again remembers all that had occurred during every former alternation of that state; but he not only remembers this, he recalls also the events of his normal existence; so that, whereas the patient in his somnambulic crisis has a memory of his whole life, in his waking interval he has a memory only of half his life. At the time of Locke, the

phenomena of somnambulism had been very little studied; nay, so great is the ignorance that prevails in this country in regard to its nature even now, that you will find this, its distinctive character, wholly unnoticed in the best works upon the subject. But this distinction you observe is incompetent always to discriminate the state of dreaming and somnambulism. It may be true that if we recollect our visions during sleep, this recollection excludes somnambulism, but the want of memory by no means proves that the visions we are known by others to have had were not common dreams. The phenomena, indeed, do not always enable us to discriminate the two states. Somnambulism may exist in many different degrees; the sleep-walking from which it takes its name is only one of its higher phenomena, and one comparatively rare. In general, the subject of this affection does not leave its bed, and it is then frequently impossible to say whether the manifestations exhibited are the phenomena of somnambulism dreaming. Talking during sleep, for example, may be a symptom of either, and it is often only from our general knowledge of the habits and predispositions of the sleepers, that we are warranted in referring this effect to the one and not the other class of phenomena. There is, however, abundant evidence to prove that forgetfulness is not a decisive criterion of somnambulism. Persons whom there is no reason to suspect of this affection, often manifest during sleep the strongest indications of dreaming, and yet, when they awaken in the morning, retain no memory of what they may have done or said during the night. Locke's argument, that, because we do not always remember our consciousness during sleep, we have not, therefore, been always conscious, is thus on the ground of fact and analogy disproved."

"A man in this state," says Falret, "has no longer the same relations with the exterior world. He enters into movements which seem the result of the will, since he avoids blows and falls with the greatest nicety; and yet he does not seem to see, or at least his sight appears very confused. The mind is evidently in action, since somnambulists often write things which they were unable to do when awake, maintain

conversation, and perform actions implying regular ideas. And yet after the attack they preserve no remembrance of their thoughts, feelings or actions, as if consciousness had been entirely obliterated whilst it lasted."

"Somnambulism," Abercrombie says, "differs from dreaming chiefly in the degree in which the bodily functions are affected. The mind is fixed, in the same manner as in dreaming, upon its own impressions as possessing a real and present existence in external things; but the bodily organs are more under the control of the will, so that the individual acts under the influence of erroneous conceptions, and holds conversation in regard to them. He is also, to a certain degree, susceptible of impressions from without, through his organs of sense; not, however, so as to correct his erroneous impressions, but rather to be mixed up with them. A variety of remarkable phenomena arise out of these peculiarities. The first degree of somnambulism generally shows itself by a propensity to talk during sleep—the present giving a full and connected account of what passes before him in dreams, often revealing his own secrets or those of his friends. Walking during sleep the next degree, whence the affection derives its name. The individual gets out of bed; dresses himself; if not prevented, goes out of doors; walks frequently over dangerous places in safety; sometimes escapes by a window and gets to the roof of a house; after a considerable interval, returns and goes to bed; and all that has passed conveys to his mind merely the impression of a dream. A young nobleman, living in the citadel of Breslau, was observed by his brother, in the same room, to rise in his sleep, wrap himself in a cloak, and escape by an elbow to the roof of the building. He there tore in pieces a magpie's nest, wrapped the young birds in his cloak, returned to his apartment and went to bed. In the morning he mentioned the circumstances as having been a dream, and could not be persuaded that there had been more than a dream, till shown the magpies in his cloak. Prichard mentions a man who rose in his sleep, dressed himself, saddled his horse, and rode to the place of a market which he was in the habit of attending weekly. Martinet mentions a man who was accustomed

to rise in his sleep and pursue his business as a saddler. Many instances are on record of persons composing, during the state of somnambulism; of boys rising in sleep and finishing tasks left incomplete. A gentleman at an English university had been very intent during the day in composition of verses which he had not been able to complete. The following night he arose in his sleep and finished his composition, then expressed great exultation and returned to bed.

Carus describes a clergyman somnambulist, who would get up in his sleep, take paper and write out a sermon. If a passage did not please him, he would strike it out and correct it with great accuracy. Steltzer reports the case of a somnambulist who clambered out of a garret window, descended into the next house and killed a young girl who was asleep there.

"Very late one evening a somnambulist entered the chamber of a prior, his eyes were opened but fixed, the light of two lamps made no impression upon him. His features were contracted and he carried in his hand a large knife. Going straight to the bed he had first the appearance of examining if the prior was there. He then struck three blows, which pierced the coverings, and even a mat which served the purpose of a mattress. In returning, his countenance was unbent and was marked by an air of satisfaction. The next day the prior asked the somnambulist what he had dreamed of the preceding night, and the latter answered that he had dreamed that his mother had been killed by the prior, and that her ghost had appeared to him, demanding vengeance, that at this sight he was so transported by rage, that he had immediately run to stab the assassin of his mother; that a little while after he awoke, bathed in perspiration, and very content to find he had only dreamed."

Pavor nocturnus, as B. Sachs* points out, is a condition where children wake up a few hours after they have entered into a sound sleep, are possessed as a rule by great fear, fail to make out their surroundings and act as though in a temporary dazed condition. They do not understand the soothing words of parent or physician and often continue in a state

*Nervous Diseases of Children.

of excitement until they fully regain consciousness or fall into a sound sleep. These phenomena occur in nervous children most frequently, but may appear in any around the stress periods beginning with the end of the first dentition. The condition often survives into adolescence and even beyond and is then a source of occult tendencies and may be an expression of nocturnal epilepsy.

A CASE OF SENSORY APHASIA IN AN OCTOGENARIAN.

BY ALBERT S. ASHMEAD, M. D.,
New York.

It is not often that an attack of cerebral embolism occurs while the patient is writing a letter, so I shall here record such a case. I exhibit here the letter.

May 21/08

Dear Daughter Elizabeth

Your postal from Haverford
just at hand, but the pretty scarf
came yesterday. As soon as mother
saw it she said she could not use it,
because too "flimsy" as she calls it,
and not serviceable enough for common
uses. I at once wrapped it up as before
keeping the two tags in, so that you would
have no trouble in returning it, although
ever so much obliged to you for this kind
effort to please. And now all of a
sudden I have trouble to see how to
write, and leave off once. This
suddenly and I can see what it
is one it were see it one it once
see to see what wanted it once
done it one one what would
would one it once in one who one
know, one wants it who is it it
Loving

It will be observed that the will of this patient persisted until he had finished his letter; this is remarkable. And also it will be perceived that the patient's brain rang and rang on the sound, or cognizance, of the word "one," "once," "wonce," "wanis," "whons." The loss of his knowledge of words began while writing his letter, which is in lead pencil with the word "obliged", which he spelled "obligiecs;" next in error comes "effort", which he wrote "efford;" then "blease" for "please," and so on. Many of these words so misspelled, or wrongly sounded, were erased by the patient before being wrongly spelled and the erasures are not seen on the photographic copy of the letter, and which shows that the brain of the patient had recognized their errors and tried to regain his knowledge of words and letters as it was slipping away from him.

This patient is an educated gentleman of means, who had lived a temperate, God-fearing and retired, almost reclusive life, for 40 years. He knew perfectly well how to spell correctly and the proper use of words, and all his writings were always coherent, his language spoken or written was always correct. He is 84 years of age, and up to this attack has never had any mental failure or sensory infirmities due to senility. He is myopic but can read without glasses. His hearing is perfect and his brain exceedingly alert naturally, and his will power is great. He is my own father. Two weeks before this attack he had complained that his left foot and ankle were swollen which he attributed to a tight shoe, pressing on an old callous spot of the sole of the foot. He has no diabetes. I thought that his embolismic attack might be due, therefore, to an endarteritis of the left leg. His doctor, however, has dissipated this belief in a letter which I received from him which I append.

His heart's action has for years been good, pulse rate 84 or 86, regular and rhythmical. There was never any aortic irregularity. No insufficiency, no murmur.

After the attack, and when he had finished his letter, he writes me, he at once went to a couch and took a nap, as he calls it, of two hours' duration, then he got up and walked about his room, "feeling weak."

The second letter, which I reproduce here, was written the day following his attack. It shows no aphasia whatsoever remaining.

May 22/08

Dear Daughter Emeline,

Yesterday while reading my Ledger my sight seemed to fail rapidly and after resting an hour or two commenced a letter to Lil at your house about a very pretty (but too lacy) a shawl she had sent to mother from Wanamaker; but after writing a few lines as you and she will both now read it, could not control either sight or thoughts or even spelling, and finished it as well as I could intending to mail it at once to her at your house but after sending for my doctor and getting great relief (apparently well this morning and the swelling of my foot entirely gone) I thought it better to mail this to you so that some physician could understand my condition and explain it to you both with love to all of you,

There was no motor center of the brain affected, the

attack was completely sensory, and involved the special nerves of sight and hearing, for his brain sounded the word "one" over and over again, as in his letter it is spelled differently many times. Where was the clot then? Has it dissolved completely so soon and easily without paralysis? Or is there another brain lesion in this case?

The occurrence of dropsy of the foot (or perhaps feet) for at least 3 weeks immediately preceding this attack would indicate a heart weakness. At the moment of writing his aphasic letter he may have had some fluttering or intermittence in the heart's action to account for the clot formation on a valve, perhaps, and which could have been driven forward through the aorta and carotids to occlude some vessel at the base of the brain (the sensory area) near, say, the corpora quadrigemina and involving cortical centers, the third convolution, the speech center; sight and speech would be here affected, or nuclear centers in the pons and medulla. But there was no nystagmus (sclerotic) nor inequality of pupils (quadrigemina lesions), nor were the corpora striata involved. The second and eighth nerves were mainly affected. It was absolutely a sensory aphasia, involving the cranial nerves, first of sight (quadrigeminal), then the auditory as evidenced by the ringing sound of "one", or did the mind act merely automatically in its recognition of the sounding word, and last the nerve of speech, as is evidenced by the doctor's last letter from which I quote hereafter?

The clot was quickly dissolved and the attack readily passed off without paralysis.

In answer to my inquiries the doctor wrote me May 27—6 days after the attack—as follows: "Your father's condition is all one could wish. He has recovered so much as to be about as usual. There was no unconsciousness at the time he was affected. He knew that there was something the matter but could not speak clearly, if at all. I found no aortic insufficiency nor endarteritis of leg. Both feet were dropsical before the attack occurred. Pulse's rate now is 80. It is compressible, rhythmical under digitalis. I cannot find any intermittency. The pupils are similar. There is no paralysis whatever."

My father wrote yesterday that the swelling in his feet since the attack is entirely gone.

Both feet being dropsical preceding the attack would imply a heart origin of the clot.

Had but one foot or leg been dropsical we might suspect an endarteritis; a double arteritis I think, is unusual.

The aphasic letter, it will be observed, is written strictly to the lines of the paper; there is no wobbling above or below them.

May 25. 1908

Dear Son Albert,

Your letter with H. G. A's

request for some family dates has not been complied with because a sudden attack of what might have been a serious illness caused my incompetency to do it.

Dr. Tunny says I am getting along as well as can be, and I am now not inconvenienced but by a feeling of weakness, so you will have to wait awhile and then I will copy what I have on hand.

Hope all of you keep well and prosperous.

Lovingly

In this letter (four days after the attack) only the letter "e" between "p" and "t" in the word "incompetency" is omitted. There is no other evidence of aphasia and this one lapsus might be due to old age or carelessness.

The right hand wrote it and this would have been the side to be paralyzed had a motor center of this brain been

affected. The corpus striatum therefore was not involved; only the sensory centers of the cranial nerves I have named and the third frontal convolution of the cortex. (Note Exhibit III.)

LEGAL OBSCENITY AND SEXUAL PSYCHOLOGY.

BY THEODORE SCHROEDER,

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IT is intended here, from the view-point of sexual psychology, to discuss critically the judicial conception of the nature of "obscenity" and "modesty" in their relation to the suppression of "obscene" literature and art. It is believed that such an analysis, made in the light of recent scientific development, must suggest some legal problems which could hardly have been thought of more than a decade ago.

The occasion for this discussion arises primarily from the fact that when "obscene" literature and art were penalized, none of the statutes prescribed any test by which to determine the dividing line between that degree of obscenity which is criminal and that which is only a matter of bad taste, and non-criminal. In harmony with the pre-dominant opinion of that time, legislatures assumed, and courts decreed, that all humanity have an innate, and uniform, sense of modesty and decency, by which we may acquire a direct sense-perception of the "obscene" qualities of a book or picture. If this assumption is true, the judicial superstructure is impregnable.

If on the other hand that assumption is untrue, and our sense of decency, obscenity, etc., is a matter of education and experience, or is determined by each according to his personal sex-sensitiveness, or his emotional and ideational associations, determined by personal habits and moral idiosyncrasies, and is variable as these factors are variable, or if it shall develop that the only elements of unification generalized in the word "obscene" are wholly subjective to the Judge or Juror, or other person passing judgment, and not in-

herent in the book itself, then it might follow that all these laws are a nullity for want of a statutory definition of the crime; for while ignorance of the existence of a law can excuse no one, yet ignorance of the meaning of an undefinable criminal law, must excuse everybody. (See authorities cited at the end of this essay.)

First we will exhibit the judicial dictum that the limits and test of "obscenity" are a matter of common knowledge and therefore need no statutory definition. This will be followed by the judicial statement of reasons for believing in an innate sense of the obscene and of the modest. These may be contrasted with the contrary conclusions of the scientist. The issues thus formed will be followed by a statement of some of the evidences which support the contrary view of the scientists. A brief discussion of the psychology of modesty and brief suggestions as to the legal consequences of this scientific study, will close the essay.

Are Tests of "Obscenity" Common Knowledge?

Our courts have answered this question in the affirmative, but they promptly contradict that statement by framing mutually destructive tests of "obscenity" such as no dictionary maker or person of ordinary intelligence ever thought of. This is to be expected so long as judges, without hearing argument or considering a single factor of the scientific aspect of the problem, assume to determine the facts of natural science by mere dogmatic, judicial dictum. That is precisely what has been done.

Thus it is said: "The statute does not undertake to define 'obscene' or 'indecent' The words are themselves descriptive, These are matters which fall within the range of ordinary intelligence." (People vs. Muller, 96 N. Y. 410.)

If the quoted words mean only that each person within his fund of common knowledge, includes a knowledge as to what he personally deems to be "obscene", then the statement may be true, but is certainly unimportant. If on the other hand it is asserted that common knowledge will enable us to know under all circumstances what everyone else must deem

"obscene" in all conceivable cases, and that all our judgments in such matter are alike, then the statement is untrue, and because untrue the statute is a nullity on account of the uncertainty as to what it penalizes.

Likewise the Supreme Court of the United States has implied much the same thought as the N. Y. Court when the former used these words: "Everyone who uses the mails . . . must take notice of what in this enlightened age is meant by decency, purity and chastity in social life and what must be deemed obscene, lewd and lascivious." (U. S. vs. Rosen, 161 U. S. 42.)

This is true if all humans have an innate or intuitional and uniform conception of what the words in question symbolize. But such empty judicial rhetoric does not help us to a solution of the real question, which is: Have we such a uniform, innate or intuitional, immediate sensuous cognition of the "obscene," as to preclude the necessity for a statutory definition of that element of the crime?

Another court used these words: "There are in the language, words known as words obscene in themselves. It is not necessary in order to make a book obscene, that such words should be found in it. * * * A book is said to be obscene which is offensive to decency or chastity, which is immodest, which is indelicate, impure," etc., etc. (U. S. vs. Bennett, Fed. Case No. 14571.)

To those seeking accuracy of description for statutory crimes, the use of such mystifying epithetic tautology is not very reassuring as to the clarity of the judicial vision which could mistake it for a definition. Likewise the appeal to the consensus of opinion in "this enlightened age," has been made in support of every superstition that has ever paralyzed the human intellect. It would be more reassuring if judges had given, or would give, us a test of obscenity, in terms of the objective, sense-perceived qualities of literature, by which test alone we could unerringly and with unavoidable uniformity, draw the same, exact, unshifting line of partition between what is obscene and what is pure in literature, no matter who applies the test. Until they furnish such a test to us, their dogmatic assurance that "this enlightened age," possesses such

undisclosed knowledge of standards, is not very satisfactory. Without such a test, there is no uniform law to control our conduct, nor that of our courts or juries.

The universally implied judicial assumption, that all have a uniform, innate sense of obscenity and decency, by which we all draw the same line of demarkation between the two and between each and its opposite, had its origin farther back in our juridical history when such problems had a different aspect, even among scientists. By the unavoidable, yet often unfortunate, judicial habit of following precedent, courts have continued the error long after scientists have abandoned the old foundation for it.

We shall presently see that our judicial notions about the innateness of our knowledge as to standards of "obscenity" had their origin deep in the religious sentiments of the time when these laws were passed and received their first judicial interpretation. Later we will be reminded of the great change which has remoulded our religious as well as our scientific beliefs, so as to necessitate an abandonment of the premises upon which the courts built their idea of the intuitive character of our knowledge of the "obscene."

The Courts on the Origin of Modesty.

First then we will study the foundation of the judicial dictum upon the psychologic question which is here involved. The most complete judicial vindication of the idea that our conception of modesty is innate and therefore uniform in all humanity, is found in *Arderly vs. the State*, 56 Ind. 329, decided in 1877. Then the court said: "Immediately after the fall of Adam, there seems to have sprung up in the mind, an idea that there was such a thing as decency, and such a thing as indecency, * * * and since that time, the idea of decency and indecency have been instinctive in and, indeed, a part of, humanity. And it historically appears that the first most palpable piece of indecency in the human being was the first public exposure of his or her, as now commonly called privates; and the first exercise of mechanical ingenuity was the manufacture of fig-leaf aprons by Adam and Eve, in which to conceal from the public gaze of each other, their now but not

then called privates. This example of covering their privates has been imitated by all mankind since that time, except perhaps by some of the lowest grades of savages. Modesty has ever existed as one of the most estimable and admirable of human virtues." (Ardery vs. State, 56 Ind. 329, A. D. 1877.)

A similar conclusion is expressed by a Federal Judge. "There is in the popular conception and heart such a thing as modesty. It was born in the Garden of Eden. After Adam and Eve ate from the fruit of the Tree of Knowledge they passed from that condition of perfectability which some people nowadays aspire to, and their eyes being opened, they discerned that there was both good and evil, 'and they knew that they were naked, and they sewed fig-leaves together, and made themselves aprons.' From that day to this, civilized man has carried with him a sense of shame,—the feeling that there were some things on which the eye—the mind—should not look, and where men and women become so depraved by the use, or so insensate from perverted education, that they will not veil their eyes, nor hold their tongues, the government should perform the office for them in protection of the social compact and the body politic." (U. S. vs. Harmon, 45 Fed. Rep. 423, A. D. 1891.)

This question-begging, by implications made from such phrases as "protection of the social compact and the body politic," we must pass by, as the phrase itself belongs to an age of outgrown political speculation. So also the outrageously absurd assumption that persons may properly be denounced as moral degenerates if they have become so insensate to sensual suggestions that they can view nude humans without being ashamed, because not sexually excited nor afraid of the judgment of those who are. To many it will seem as though the sexually insensate ones are more clean-minded and decent than the judge who denounces them. However, in passing we may mention that the same opinion admits that some have "blunted sensibilities" and others, acute sensitiveness, from which it follows that our sense of modesty, etc., is not always uniform, nor affords any certainty or uniformity in the enforcement of these laws.

The Changes Wrought by Scientific Progress.

Since 1877, when the Arderly case was decided, a great change has come to the entire intellectual world. Last year the public press proclaimed that a commission of scholarly catholics, appointed by the Pope, had made a report to the effect that the books of Moses are not infallible and cannot be accepted as being in all respects literally true. Such statements are particularly weighty when we remember that the Roman Catholic Church, in such matters, is so extremely conservative as to be often stigmatized as reactionary.

In a recent Catholic cyclopedia, Benziger's *Library of Science*, the Jesuit Fathers show their accord with the main features of the doctrine of organic evolution. No Catholic, with even moderate scientific intelligence, has within two decades expressed any disagreement with the Jesuit Father, Erich Wasman of Luxemburg, when in his work, *Modern Biology and the Theory of Evolution*, he says: "The theory of evolution to which I subscribe as a scientist and a philosopher, rests on the foundations of the Christian doctrine which I hold to be the only true one." Innumerable Catholic scientists have similarly expressed acceptance of the scientific doctrine of organic evolution. (For some discussion of this see: Haeckel's *Last Words on Evolution*.)

While, of course, there is still much controversy as to detail and incidental matter, it can be truthfully said that as between the dogmas of special creation and fixity of type, and the general features of the doctrine of organic evolution, there is no longer any disagreement between educated persons.

As is to be expected, the Protestant scientists are even more outspoken than the Catholic in accepting the results of modern scientific research, and the doctrine of organic evolution is now being taught in all the theological seminaries of Europe and America. The story of creation as related in Genesis, is accepted everywhere as being a myth or an allegory.

We may here content ourselves with a single quotation showing the present attitude of the great mass of educated present day Christians toward a ready acceptance of new statements of scientific truth. Prof. James B. Pratt, of

Williams College, says this: "It [religion] must forever be sloughing off an old shell and growing a new one. The shell indeed is important; but woe to the religion which identifies its life with its shell, or refuses to part with its shell when it has ceased to be a protection and has become a champing, choking incumbrance, to the growth of its inner life. * * * * If Christianity today should identify itself with the infallibility of the scriptures, or with the creation according to Genesis, or with any of the dogmas of Christology, it would condemn itself to swift decay." (*The Psychology of Religious Belief*, 287.)

Creation, the fall of man, and the fig-leaf apron, according to Genesis (in their literal interpretation), are no longer believed to be true by any Christian with scientific education, and thus disappears the original foundation upon which rested the judicial opinions that humans, in the Garden of Eden, acquired an innate and therefore uniform sense of the obscene, the modest, etc.

Scientists on Modesty as an Instinct.

The judicial dictum that modesty, as innate in man, induced the concealment of the human form is not very important in itself. However, the discussion of the question is very material to the problem under consideration, because the evidence bearing upon that issue will illuminate the whole subject of the psychology of modesty, and especially help us to determine whether or not (within the limit of certainty essential to the validity of a criminal statute) "obscurity" is definable in terms of a book or picture, or is at all a quality residing in the thing contemplated, or on the contrary whether it is indefinable because resident exclusively within and dependent upon the peculiar intellectual and emotional associations and predisposition of the contemplating mind.

The judicial assumption was that modesty is innate and intuitive, and therefore antedated and induced the use of clothing. Now will be quoted the contrary conclusion of scientists, that modesty instead of being the cause is an effect, a mere artificial, varying and unstable psychologic consequence, produced chiefly by the wearing of clothing.

Westermarck (*Hist. of Marriage*, p. 211.,) after a careful review of the evidence, says: "These facts appear to prove that the feeling of shame, far from being the original cause of man's covering his body, is, on the contrary, a result of this custom; and that the covering, if not used as a protection from the climate, owes its origin, at least in many cases, to the desire of men to make themselves attractive." (Quoted from 7th Ed. of Krafft-Ebing, *Psychopathia Sexualis*, p. 15. See also: Ellis' *Studies in the Psychology of Sex* (Modesty) p. 38.)

"In a former work (*L'Evolution de la Morale*) I have attempted to trace the genesis of a sentiment peculiar to humanity—the sentiment of modesty. It would be inexpedient here to treat the subject afresh in detail, but I will recall the conclusions arrived at by that investigation. Modesty is par excellence a human sentiment, and is totally unknown to the animals, although the procreative need inspires them with desires and passions essentially identical with what in man we call love; it is therefore certainly an artificial sentiment, and comparative ethnology proves that it must have resulted from the enforced chastity imposed on women under the most terrible penalties." (Letourneau, *Evolution of Marriage* 56.)

"There seems to be no doubt whatever that clothing was adopted for warmth and decoration, and not from motives of decency. Drapery has always served to inflame sexual passion, and some tribes have regarded all garments as indecent. Mr. Wallace found the Brazilian Indian woman who put on a petticoat, almost as ashamed of herself as civilized people would be if they took theirs off. Only prostitutes clothe themselves among the Saliras, and they dress to excite through hiding the body. * * * As Westmark says: 'It is not the feeling of shame that has provoked the covering, but the covering that has provoked the feeling of shame.' * * * It's [modesty's] origin was not in morality and a native sense of decency, though modesty is now estimated as moral and decent." (*Chapters on Human Love*, by Geoffrey Mortimore, pp. 37, 38, 40, 41.)

"The conditions of its (modesty's) origin is little understood. H. Spencer and after him, Sergi, maintain that it

results from the habit of wearing clothes, which began with man (not with woman) from motives of ostentation and ornament. * * * Besides this special mode of expression (blushing) modesty shows itself by concentric, defensive movements, by a tendency to cover or disguise certain parts of the body. The means employed to this end are of the most various description according to race, country or period: some hide the whole body, some the sexual parts only, or the face or bosom, some paint the body, or the face, etc. It is impossible to determine the exact part played in this diversity by circumstances, climatic conditions, and the association of ideas, compulsion, fashion, imitation, and even chance." (Ribot, *Psychology of the Emotions*, 272.)

"The native assumption that men were ashamed because they were naked, and clothed themselves to hide their nakedness, is not tenable in the face of the large mass of evidence that many of the natural races are naked and not ashamed of their nakedness; and a much stronger case can be made out for the contrary view, that clothing was first worn as a mode of attraction and modesty then attached to the act of removing the clothing." (Prof. Thomas, in *Sex and Society*, p. 201.)

Darwin expresses his belief "that self-attention directed to personal appearance, in relation to the opinion of others," and "not to moral conduct" is the fundamental element in shyness, modesty, shame and blushing. (*Expression of Emotions in Man and Animals*, p. 325-327.)

"But while we find cases of modesty without clothing and of clothing without modesty, the two are usually found together, because clothing and ornament are the most effective means of drawing the attention to the person. Sometimes by concealing it and sometimes by emphasizing it. * * * We recall the psychological standpoint that the emotions are an organic disturbance of equilibrium occurring when factors difficult of reconciliation are brought to the attention. * * * When the habits are set up and are running smoothly, the attention is withdrawn and nakedness was a habit in the unclothed societies, just as it may become a habit now in the artists' model. * * * When once a habit is fixed, interference with its smooth running causes an emotion. The nature

of the habit broken is of no importance. If it were habitual for grande dames to go barefoot on our boulevards or to wear sleeveless dresses at high noon, the contrary would be embarrassing." (Prof. Thomas' *Sex and Society*, p. 207 to 218.)

"I acknowledge that I myself, as the years went by, changed the idea I first had of modesty, and which I treated in the *Physiology of Pleasure*. At first it seemed to me a sentiment that rises within us in childhood and youth, spontaneous as egotism, self-respect, love; and then, again, I became persuaded that modesty is taught first and learned afterward; for which reason it is one of those sentiments which I term acquired or secondary. . . . The animals demonstrate to us some forms emanating from modesty. Many of them conceal themselves in order to offer sacrifice to voluptuousness; numerous females sought by the male begin by fleeing, resisting, by hiding that which they desire to concede. And this is probably an irreflective automatic act; it is, perhaps a form of fear, which rises before the aggressive requirements of the male; these flights, these resistances, these phantoms of modesty have the scope to excite the female as much as the male, and to prepare the soil more suitable for fecundation. . . . Sherihat ordered the Turkish women to cover the back of the hand, but permitted them to expose the palm. The Armenian women of Southern India cover the mouth even at home, and when they go out they wrap themselves in white linen. The married live in great seclusion and for many years they cannot see their male relatives and conceal their faces even from the father-in-law and mother-in-law. These two examples selected from a thousand that might be cited, suffice to persuade us that accessory and conventional elements are often joined to true modesty which, physiologically considered, do not belong to it. We, ourselves, without leaving Europe, find that the confines of modesty are marked in many countries by the various fashions, not according to morality or the requirements of sex, but according to national mode of dress. He who exchanged these conventional elements for modesty could write the great psychological heresy, that this sentiment had its origin in the custom of covering one's self.

"*The sentiment of modesty is one of the most changeable in form and degree, and we will write its ethical history in the volume which we will dedicate to the ethnology of love. Thus without going further than our race and time, we have women who would let themselves die rather than subject themselves to an examination with the speculum, and we have men of great intelligence and lofty passions who confess that they feel scarcely a shadow of modesty.*"

"Modesty is one of the choicest forms of seduction and of the reticence of love; it is an extra current of the great fundamental phenomena of generation; it is a physical respect of one's self; it is one of those psychical phenomena of the highest order. If the sentiment of modesty were not a great virtue, it would be the most faithful companion of voluptuousness, the greatest generator of exquisite joys. An ardent thirst and an inebriating bowl; what joy, but what danger of satiety." (*The Physiology of Love*, pp. 91 to 97.)

Statement of Issue.

The conflict between the before quoted judicial dictum and the later scientific conclusions, form the issues now to be investigated. Before marshalling any of the evidence it is desirable to restate that issue of science and again to indicate the legal consequences toward which the conclusion should lead us.

We are to determine whether modesty is an innate attribute of all humans,—a part of human nature itself—and therefore a matter within the range of ordinary intelligence resulting in uniform judgments by a uniform intuitive standard; or whether, if those judgments are not instinctively alike, they are so variable and uncertain as to make a statutory definition essential to uniformity in the execution of the criminal statutes in question, and therefore essential to the constitutionality of the statute.

In other words, is "obscurity" a matter of sensuous cognition, discoverable by unerring and uniform standards, existing in the nature of things, or does it exist wholly within the contemplating mind, so that every verdict or judgment is therefore dependent, not upon the letter of any general law,

but in each person according to his personal whim, caprice, prejudice, "moral" idiosyncracies, varying personal experiences and different degrees of sexual hyper-aestheticism or of intelligence about sexual psychology? If the latter, then the statute is clearly void for uncertainty. These issues of science we will now investigate.

"What Is Obscenity?"

The justification of the conclusions of the scientist above quoted is necessarily varied, and to be most effective the evidence must be so marshalled as most convincingly to bring out the uncertainty of the statute,—the indefinable nature of the "obscene." The arguments naturally classify themselves under several different heads, and will be so discussed. The first proposition to be contended for if true makes the uncertainty of the statute so indisputable as to leave not the slightest doubt as to its unconstitutionality, because the thing penalized is non-existent, as an objective sense-perceived quality of literature or art. However, that contention, while it offers the best psychologic explanation for the uncertainty of the statute, is not an indispensable element of the argument. In other words the first proposition may be all wrong, and yet the statute be so uncertain as to be a nullity. With this much by way of explanation, I proceed to state this first contention.

Stated in technical language it is this: The only element of unification which is generalized in such words as "obscene and indecent" is a subjective emotion associated with an infinite variety of objective stimuli, having no indispensable common element. In popular phraseology and in its application to the concrete, it might be quite accurately expressed in these words. Obscenity is never the quality of a book or picture, but is exclusively an associated condition in the mind and emotions of the reading or viewing person, and is erroneously read into or ascribed to the printed page.

I am not unaware how startling such a statement must seem to those who may have given little or no critical thought to sexual psychology, and who therefore have not even dreamed that such a question could be raised. After this propo-

sition was first advanced by me, in a paper before the XV *Congres International de Medicine*, held at Lisbon, April, 1906, some quasi-scientists have dogmatically expressed their emotional aversion to such a conclusion, but not one has had the courage to try to answer the argument. Expert psychologists, however, have expressed their agreement with my conclusions. However, the little teapot storms which my proposition raised in the minds of a very few people credited with intelligence, again warns me that I am disrupting old convictions, resting upon established emotional associations, and that therefore, I cannot hope for an open-mind even in the reader of more than average intelligence and that again I must take valuable space to plead for intellectual hospitality for my argument.

To this end let me recall the well known anecdote of the Royal Society, to whom King Charles II proposed that they explain how it came that a vessel of water weighs no more after having a live fish put into it, though it does if the fish be dead? Various solutions of great ingenuity were proposed, discussed, objected to, and defended. After long bewilderment, it occurred to some one to try the experiment, and it was found that the fact to be explained existed only in the mind of the monarch.

So now, I beg you to be patient with an argument which may prove to you that almost daily we are sending persons to felon's cell, and are gravely discussing certain alleged "evils" which the criminal law is designed to suppress, without ever seriously inquiring if the facts which determine guilt exist anywhere except in the imagination of the judge and jury who try the accused.

It was objected to the system of Copernicus, that if the earth turned upon its axis, as he represented, a stone dropped from the summit of a tower would not fall at the foot of it but a great distance to the west, in the same manner as a stone dropped from the mast-head of a ship moving at full speed does not fall at the foot of the mast but toward the stern. To this it was answered that a stone being part of the earth obeys its laws and moves with it; whereas it is no part of a ship, of which its motion is therefore independent. The solution was admitted by some and opposed by others with great

earnestness. It was not until one hundred years after the death of Copernicus, that an experiment demonstrated that a stone thus dropped from the mast-head does fall at the foot of it.

Could there be any harm if we made a scientific inquiry to ascertain if all the "obscenity" which we criminally punish has any existence outside of the mind and emotions of those whose unreasoned predispositions or emotional associations are offended? The laws against imaginary crimes are annulled when we destroy the superstition, if such it is, which is an indispensable assumption of the statutes.

As I contemplate the difficulty of my present unpopular task, I am again and again impressed that it is not unlike that of a lawyer who should have presumed to appear before an English Judge of three centuries ago and seriously endeavored to persuade him that there were no such beings as witches. There are many things in common between the belief in the objective verity of witches and of obscenity. Both beliefs had their origin in religion, and now we are to consider if obscenity, like witch craft, won't disappear when we cease to believe in it. I beg the reader to remember that the immediate problem is one of science and not of religion, morals or law. Let us think it over in the calm dispassion of the true scientist's quest for truth.

Fanatical as well as hospitable men and pious judges, otherwise intelligent, have affirmed the reality of both witches and obscenity and, on the assumption of their inerrancy in this, have assumed to punish their fellow-men. It is computed from historical records that 9,000,000 persons were put to death for witchcraft after 1484. The opponents of witchcraft were denounced just as the disbelievers in the "obscene" are now denounced. Yet witches ceased to be when men no longer believed in them. Think it over and see if the "obscene" will not also disappear when men cease to believe in it.

In 1661 the learned Sir Mathew Hale, "a person than whom no one was more backward to condemn a witch without full evidence," used this language: "That there are such angels [as witches] it is without question." Then he made a

convincing argument from Holy Writ and added: "It is also confirmed to us by daily experience of the power and energy of these evils spirits in witches and by them." (See *Annals of Witchcraft*, by Drake, preface, page xi.)

A century later the learned Sir William Blackstone, since then the mentor of every English and American lawyer, joined with the witch-burners in bearing testimony to the existence of these spook-humans, just as our own courts to-day join with the obscenity-burners to affirm that obscenity is in a book and not in the reading minds, and that therefore the publisher, and not the reader, shall go to jail for being "obscene."

Blackstone said: "To deny the possibility, nay, actual existence of witchcraft and sorcery is at once flatly to contradict the revealed word of God in various passages of both the Old and New Testament, and the thing itself is a truth to which every nation in the world hath in its turn borne testimony, either by example seemingly well tested, or by prohibitory laws which at least suppose the possibility of commerce with evil spirits." (Blackstone's *Commentaries*, page 59. Edition of 1850.)

And yet when men ceased to believe in witches, they ceased to be, and so when men shall cease to believe in the "obscene" they will also cease to find that. Obscenity and witches exist only in the minds and emotions of those who believe in them and neither dogmatic judicial dictum nor righteous vituperation, can ever give to either of them any objective existence.

In the "good old days," when a few, wiser than the rest, doubted the reality of witches, if not themselves killed as being bewitched, they were cowed into silence by an avalanche of vituperation such as "infidel," "atheist," or "emissary of Satan," "the enemy of God," "the anti-Christ," and some witch-finder would get on his trail to discover evidence of this heretic's compact with the devil; as is the case with obscenity, those seeking to destroy belief in witchcraft were accused of seeking to abolish morality, and as a successful scarecrow to prove this it was argued by John Wesley and

others, that to give up witchcraft was in effect to give up the Bible. Let us not be frightened by such conjectural morality, but rather inquire boldly and frankly as to the objective import and reality of all that we punish as dangerous to society under the name of "obscenity."

How this is duplicated in the attitude of a large portion of the public toward those who disbelieve in the objectivity of "obscenity!" Whether obscenity is a sense-perceived quality of a book, or resides exclusively in the reading mind, is a question of science, and as such, a legitimate matter of debate. Try to prove its non-existence by the scientific method and the literary scavengers, instead of answering your argument by showing the fallacy of its logic or error of fact, show their want of culture, just as did the witch-burners. They tell you that you are (quoting from Mr. Comstock) "either an ignoramus or so ethereal that there is no suitable place on earth for you," except in jail. They further hurl at you such unilluminating epithetic arguments as "immoral," "smut-dealer," "moral cancer-planter," etc., etc. Such epithets may be very satisfying to undeveloped minds, but they will not commend themselves very highly to any person wishing to enlighten his intellect upon the real question at issue. Again we say: This is a matter of science, which requires fact and argument and cannot be disposed of by question-begging villification. It is a regrettable fact that the "moral" majority is still too ignorant to know that such question-begging epithets when unsupported are not argument, and its members are too obsessed with sensual images to be open to any proof against their resultant "obscene" superstition.

Think it over and see if when you cease to believe in the existence of "obscenity," you must not also cease to find it. If that be true, then it exists only in the minds and emotions of those who believe in the superstition. Empty your mind of all ideational and emotional associations which the mis-called "pure" people have forced into your thoughts. Having done this, you may be prepared to believe that "unto the pure, all things are pure, but unto them that are defiled and unbelieving is nothing pure, but even their mind and con-

science is defiled." (Titus, 1-15.) Not till thus cleansed can you join in these words: "I know and am persuaded by the Lord Jesus that there is nothing unclean of itself, but to him that esteemeth anything to be unclean, to him it is unclean." (Romans 14, 14.)

The courts are more refined, though not more argumentative nor convincing, in their manner of denouncing dissenters. The judicial formula is this: "When such matters are said to be only impure to the over-prudish, it but illustrates how familiarity with obscenity blunts the sensibilities, depraves good taste, and perverts the judgment." (45 Fed. Rep. 423.) Again we ask for fact and argument, not question-begging dogmatism. The statute furnishes no standard of sex sensitiveness nor is it possible for any one to prescribe a general rule of judgment by which to determine where is the beginning of the criminal "blunted sensibilities," or the limit of "good taste," and the law-making power could not confer this legislative authority upon a judge, though in these cases all courts are unconsciously presuming to exercise it.

Furthermore, it is not clear that "blunted sensibilities" are not a good condition to be encouraged in the matter of sex. Who would be harmed if all men ceased to believe in the "obscene," and acquired such "blunted sensibilities," that they could discuss matters of sex, as we now discuss matters of liver or digestion—with an absolute freedom from all lascivious feelings? Why is not that condition preferable to the diseased sex-sensitiveness so often publicly lauded, when parading in the verbiage of "purity?" If preferable, and so-called "obscene" literature will help to bring about such "blunted sensibilities," would it not be better to encourage such publications? It requires argument and fact, rather than "virtuous" platitudes, to determine which is the more healthy-minded attitude toward these subjects. I plead for scientific research, not the brute force of blind dogmatism and cruel authority. Let us remember that "in scientific inquiry the ability to weigh evidence goes for much, but facility in declamation [and vituperation] goes for little." (Fiske's *Cosmic Philosophy*, v. 2, p. 173.)

If, in spite of the argument by vituperation, a person refuses to submit "with humble prostration of intellect" to the demands of moral snobbery, he is cast from the temple of "good society" into jail. Then the benighted act as though by their question-begging epithets, or jail commitment, they had solved the scientific problem which is involved. Let us examine if it is not as true of obscenity, as of every witch, that it exists only in the minds of those who believe in it.

There is another particular in which the controversy over witchcraft resembles the controversy concerning the suppression of the so-called "obscene." The earlier opponents of witchcraft always deemed it most important to anticipate and defend themselves against the influence of question-begging epithets, such as "infidel" and "atheist," etc. So we find them always explaining that this is unjust because they do not really deny the being and existence of witches, but controvert only their alleged mode of operation. Thus John Webster, in 1677, defends the whole class of anti-witch-mongers by arguments of which the following is a sample: "If I deny that a witch cannot fly in the air, nor be transformed or transubstantiated into a cat, a dog, or a hare, or that a witch maketh any visible covenant with the devil or that he sucketh on the bodies, or that the devil hath carnal copulation with them, I do not thereby deny either the being of witches, nor other properties that they may have, for which they may be so-called: No more than if I deny that a dog hath rugibility (which is only proper to a lion) doth it follow that I deny the being of a dog." (*The Displaying of Supposed Witchcraft*, p. 10.)

Similar to this is it with the opponents of the censorship of obscenity. Every little while we have an explosive protest against the suppression of some book or work of art, but these moral heretics always hasten to explain their firm belief in "obscenity" as a quality of other books or pictures, but they protest that it does not exist where the censor or court thought. They firmly believe that "truly obscene literature" ought to be suppressed but they assert that a great blunder has been made in suppressing the particular book in which they are unable to discover any obscenity. They hasten to ap-

prove the arbitrary power conferred by a criminal statute which fails to furnish the criteria of guilt, but complain that the arbitrary power has been abused. They like a government by the lawless will of men rather than a government by officials who are equally subjected to the law, but they prefer it should be their own lawless will and not that of another with different ideals, that should govern.

As for me, I am not content to protest merely against the abuse of arbitrary power, I want that power itself destroyed. I am not content to deny the mode in which witches and obscenity are alleged to impair the morals of humanity. I demand that a searching and fearless inquiry be made as to the objective reality and essential characteristics of obscenity as well as witches. All this is said not by way of apology but as a plea for open-mindedness for what follows:

My contention is this: "Obscenity" is not an objective fact, not a sense-perceived quality of literature or art, but is only distinguishable by the likeness of particular emotions associated with an infinite variety of mental images. Therefore, obscenity is only a quality or contribution of the viewing mind which, being associated with some ideas suggested by a book or picture, is therefore read into it.

Nudity in Greece and Mexico.

Perhaps it is best to begin our study of modesty and nudity with a statement of conditions in ancient Greece when its civilization had reached that high place which, in some respects, we have not yet excelled. In all that follows we are always to bear in mind that we are inquiring into the innateness and uniformity of the human sense of modesty and obscenity, to see if it is possible to know from the mere reading of the statutes penalizing "obscene, indecent, filthy or disgusting" books or pictures, what conception of modesty, or what kind and degree of sex-sensitiveness determines what is prohibited.

In Greece, "it was lawful in some cities for courtesans to wear light transparent garments; but in Sparta, as can be imagined, the reverse was the rule, semi-nudity being the

badge of virtuous women." (Sanger's *History of Prostitution*, 46.)

This is further illustrated in the fact that in their athletic games and dances, the virtuous maidens appeared publicly in the nude and none were sufficiently polluted with prurient prudery to criticize. On this subject the Rev. John Potter, late Archbishop of Canterbury, has this to say: "As for the virgins appearing naked, there was nothing disgraceful in it because everything was conducted with modesty, and without one indecent word or action. Nay, it caused a simplicity of manners and an emulation of the best habit of body; their ideas, too, were naturally enlarged, while they were not excluded from their share of bravery and honour. Hence they were furnished with sentiments and language such as Gorgo, the wife of Leonidas, is said to have made use of. When a woman of another country said to her: 'You of Lacedaemon are the only women in the world that rule the men,' she answered: 'We are the only women that bring forth men.' " (*Archaeologia Graeca*, p. 645, Glasgow, 1837.)

Among the native Mexicans, who in many respects had attained a higher civilization than their Spanish conquerors, it was found, in and before the 17th century that the maidens went naked and only those who had parted with virginity covered the sexual parts. (V. 3, Bayle's *Historical and Critical Dictionary*, 774. Edition of 1734.)

Nudity and Modesty Among Primitive People of More Recent Times.

Certain Mohammedan women who can easily be induced to expose their naked bodies to the male gaze are most persistent in their refusal to uncover their faces. Chinese women, who are not shocked by the exposure of the sexual parts, would have their modesty offended to quite an unbearable degree if compelled to expose their naked feet, even to one of their own sex. There are tribes who wear but little clothing, but who consider it "indecent" to eat in each other's presence, and even members of the same family turn their backs toward each other during meals. Among the Japanese, where women perform the national dance in nudity, it was

found at the Jubilee Exhibition at Kyote, that disgust was provoked by a painting of a naked woman, though in nature nudity was in no way offensive to them. In Lapland women who would prostitute themselves cheaply, will not for a large fee expose themselves before a camera. The well-bred African negress is most anxious to conceal her breasts in modesty, and exhibits shame even when discovered suckling her babe. Many civilized women are utterly indifferent to this as one may see in the parks of any large city. So also the Arabs, who are pederasts, yet refuse to exhibit their nude bodies. In several tribes, it is, as with the Naga women, who only cover their breasts. They declare that it is absurd to cover those parts of the body which every one has been able to see from their birth, but it is different with the breasts, which come later, and are therefore to be covered. Some primitive people, who unhesitatingly go about naked, still conceal themselves during copulation; others indulge openly and are not in the least affected by publicity. (Ellis' *Modesty*, and Bebel's *Women Under Socialism*, 18, citing Bachofen.) If the tests of obscenity, decency and modesty are a "matter of common knowledge," why such varying conceptions, and where is the statutory test of "obscenity" which informs us as to which of the foregoing conceptions of modesty was incorporated into the statute?

In several countries, the consummation of the marriage by coitus in public, is a part of the ceremony. (Ellis's *Modesty*, p. 17, and others.) Among the Otaheitians, even recently, a girl is initiated into the sex-experience under the direction of a priestess as a solemn religious ceremony and in the view of a thousand. The queen gives to her and her companion, publicly, instructions as to the proper manner of its consummation. This is done with solemnity and prayer and without anything like either the leer of our stable boys or the blush of our prudes. (Westrop's *Primitive Symbolism*, pp. 39-40.)

Among some peoples modesty forbids the exposure of the male organ of generation while permitting complete female nudity, and among others the conditions are reversed. From Australia it is reported that women who did not hesi-

tate much at exposing themselves in utter nudity, yet withdrew to a secluded place to remove their scant covering. Among some East African tribes the sentiment of modesty seems to center about the menstrual period. The Samoyed women for two months after marriage conceal their faces from their husbands and only then yield to their embraces. In some places women have been allowed to go naked until they were married and required to wear clothes after marriage. Among the Montana Indians, where the women readily prostitute themselves for a small consideration, they often exhibit extraordinary sensitiveness to a physician's examination. The Adamanes women "are so modest they will not renew their fig-leaf aprons in the presence of one another." In Masai it is considered as disreputable to conceal the phallus as it is to display it ostentatiously. This will to some seem a very healthy-minded attitude, which stands in great contrast to the following example of modesty.

Dr. R. W. Felkin remarks concerning Central Africa, that he nowhere met with more indecency than in Ugabda, where the death penalty is inflicted on an adult found naked in the streets. To this we may add the testimony of H. Crawford Angus, who has spent many years in Azimba land, Central Africa. He writes: "It has been my experience that the more naked the people, and the more to us obscene and shameless their manners and customs, the more moral and strict they are in the matter of sexual intercourse." (Ellis' *Psychology of Sex*.)

Among the Drusses, where incest is practiced, divorce is easy and the elect, or spiritualists, have most licentious and sacred debaucheries, the women yet wear veils and their faces are unseen except by immediate relatives. ((?) *The Drusses the Moabites*, 116.)

"Native women of India have committed suicide rather than submit to examination by state surgeons under the English Government," [under a law regulating prostitution.] (*Unmasked*, Dr. Mary Walker, p. 133.)

"The Hindoos have a species of adultery, which with us would be considered mere flirtations: first, if a couple wink

or smile, converse together in an unfrequented place, or bathe in the same pool; second, if a man sends sandlewood, victuals, drink or other presents to a female; the third sort seems the most serious, namely, when a man and woman sleep and dally on the same carpet, kiss and embrace, and then seek some retired place, the woman saying nothing all the while. The punishments prescribed by the shaster for adultery are too barbarous for enumeration." (*Woman, Past and Present*, p. 328.)

It is related by Dr. Tournefort that in a Turkish harem he was only allowed to see the arm of a sick female protruded through a screen, without further opportunity for determining the nature of the malady." (*Woman, Past and Present*, p. 19.)

We are in the habit of denouncing Turkish polygamy as indecent and an argument in its favor probably could not be sent through the mails. Yet these Turks outdo us all when it comes to prudery. Where does the statute furnish the standard of judgment as between these conflicting pruderies?

Varieties of Christian Modesty.

Here we will exhibit a variety of differing conceptions of modesty as they are found among Christian people. The purpose is always to be borne in mind, and it is to show: First, that no particular conception, standard or focus of modesty is a part of our human nature (innate in us), and second, that therefore in each individual, his own notions of modesty are determined by his educated emotional and ideational associations and upon the degree of his sexual hyperaestheticism. Keeping these purposes in mind, let us review the historical evidences.

Bundling.

Among the early Christian Fathers we find many evidences that bundling, often in nudity, was a wide-spread custom, even among monks and nuns vowed to chastity. The practice always resulted in suspicion and no doubt quite frequently in something more real. Chrysostom, Jerome and Tertulian all write of it.

The Rev. Dr. Ruffner, after quoting these fathers and other evidences, summarized his conclusions as follows: "The practice of unmarried men—some of them clergymen—and consecrated virgins living together seems to have prevailed to a considerable extent even at this early period; but then the parties professed that there was no harm in it, seeing that there was all the while a chaste familiarity, a purely spiritual conjunction." (Ruffner's *Fathers of the Desert*, 227-232-237-238; Gibbon's *History of Christianity*, p. 161, and authorities cited.)

"Some confessors, like Robert d'Arbissell (and the same has been said of Ardhelm, the English Saint, who lived before the conquest), have induced young women to lie with them in the same beds, giving them to understand that if they could prove superior to every temptation and rise from the bed as they went to it, it would be in the highest degree meritorious." (*A Paraphrase on Historia Flagellatium*, p. 246.)

Writing on the earlier period, Gibbon states this: "The primitive church was filled with a great number of persons of either sex, who had devoted themselves to the profession of perpetual chastity. A few of these, among whom we may reckon the learned Crigen, judged it the most prudent to disarm the tempter [by self-castration]. Some were insensible and some were invincible against the assaults of the flesh. Disdaining an ignominious flight, the virgins of the warm climate of Africa encountered the enemy in the closest engagement; they permitted priests and deacons to share their bed, and gloried amidst the flames in their unsullied purity." (Gibbon's *History of Christianity*, p. 161.)

Washington Irving tells us of the bundling habit in New England as "a superstitious rite observed by the young people of both sexes, with which they terminated their festivities and which was kept up with religious strictness by the more bigoted and vulgar portion of the community." (*Knickerbocker Hist. of N. Y.* 4 Am. ed. p. 211; Stiles' *Bundling*, p. 49.)

The practice was permitted by the Puritans and found defenders among the clergy as a custom that prevailed "among

all classes to the great honor of the country, its religion, and the ladies." (Stiles' *Bundling*, pp. 51-58.)

Tolstoi tells us that in parts of Christian Russia young people, during the years of betrothal, spend their nights together without losing their virginity. To him it illustrates the blessed possibility of spiritual communion, untainted by fleshly desire. (*Die Sexuelle Frage*, 36-38.)

If memory serves me, Tacitus informs us that in his time the Germans customarily went naked and that their morals were exemplary compared to that of the Romans. A recent author informs us that: "The shirt began to be worn [in Germany] in the sixteenth century. From this fact as well as from the custom of public bathing, we reach the remarkable result that for the German people the sight of complete nakedness was the daily rule up to the sixteenth century." At their public dances exposures were quite unrestricted. (Rudeck, *Geschichte der öffentlichen Sittlichkeit*, p. 399.)

We find several times among Christian sects that promiscuous nudity was made a virtue and duty among them.

One such sect existed in the second century. Theodoret, Baronius Danaeus and St. Epiphaneus all mention them, as conducting their devotional exercises in complete nudity, and, according to some, those were expelled from the congregations who did not remain continent. Upon this last there is disagreement. (V. 1, Bayle's *Dictionary*, pp. 110-111, edition of 1734, and citations; 1, Heckethorn's *Secret Societies of All Ages and Countries*, p. 95-96; Gage, *Woman, Church and State*, 92; *Two Essays on the Worship of Priapus*, p. 172-174, and authorities.)

During the earliest days of Christianity women were baptized quite nude and by men in the presence of men, their bodies being afterward anointed with oil by the priests. One of the earliest chisms in the church arose from the protest of women against this practice, and a demand that they be allowed to baptize their own sex and the opposition of priests to that demand. (Gage, *Woman, Church and State*, 215, citing Waite's *Hist. of the Christian Religion to A. D.* 200, pp. 23, 384, 385; Benson's *Christianity of Mankind*. vol.

3, 386-393, Vol. 3; *Analecta*; *Philosophical Dictionary*; Pike's *History of Crime in England*, and citations.)

Ciampini gives a large plate representing the baptism of Agilulf and Theodelinda, King and Queen of the Longobards, A. D. 591, where they both appear naked in the font, with nothing but their crowns on, and the water is poured over their heads from a pitcher. (Lundy, Chapter on Baptism, *Monumental Christianity*, 389.)

Catherine, the first wife of Peter the Great, was received into the Greek Christian Church by a similar rite. New converts to that church are plunged three times, naked, in a river or in a large tub of cold water. Whatever is the age or sex of the convert this "indecent ceremony is never dispensed with. The effrontery of a pope (priests of the Greek Church are thus called) sets at defiance all the reasons which decency and modesty never cease to use against the absurdity and impudence of this shameful ceremony." (Count Segur, in *Woman's Condition and Influence in Society*, here requoted from *Woman, Church and State*, 216.)

The Beghards became a distant offshoot from the Franciscan Monks in the 14th century, for the purpose of practicing still greater austerities. The Beghards and another order known as the Beguines came under the influence of the Brethren and Sisters of the Free Spirit. Of those we have some very interesting accounts. Mosheim says: "And they alone were deemed perfect by these fanatics and supposed to be united to the supreme being who could behold, without any emotion, the naked bodies of the sex to which they did not belong and who, and in imitation of what was practiced before the fall by our first parents, went entirely naked and conversed familiarly in this manner with males and females without feeling any tender propensities of nature. Hence it was that the Beghards (as they were nicknamed) when they came into their religious assemblies and were present at the celebration of divine worship, appeared without any veil or covering whatever." (Mosheim *Eccl. Hist.* p. 377, Balt. ed. 1833.)

The late William Hepworth Dixon, once the distinguished editor of the *London Athenaeum*, gives us a most in-

teresting account of these people. (*Spiritual Wives*, Chap. 14. See also Lea's *Hist. of the Inquisition*, 123-407.)

In the 13th century they became known as the Adamites or Picards. Under the leadership of Picard, if not before and if not in other branches, the ascetic restraint of continence was abandoned under the doctrine of perfectionism. (4, Bayle's *Historical and Critical Dictionary*, p. 628.)

At Amsterdam in 1538 a dozen religious zealots, men and women belonging to the Anabaptists, went out upon the streets in nudity, and "they did not so much as leave a ribbon upon their heads to keep their hair tied." (4, Bayle's *Historical and Critical Dictionary*, 628.)

Within the past two decades we have seen a Russian Quaker sect of Canada called Doukhobors making pilgrimages in large numbers, both men and women being in entire nudity. (Maude's *A Peculiar People*, 241.)

"In the rules laid down by Agustin, he ordains that no one shall ever steadfastly fix her eyes upon another, even of the same sex, as this is a mark of immodesty." (Hardy's *Eastern Monasticism*, p. 54.)

Ammon and his wife, it is reported, renounced the secular life and inhabited one common ascetic apartment in the mountains of Nitria. Uneasiness finally prompted the bride to address her husband as follows: "It is unsuitable for you who profess chastity, to look upon a woman in so confined a dwelling. Let us, therefore, if it is agreeable to you, perform our exercises apart." He concurred. (Day's *Monastic Institutions*, p. 5.)

Ligouri (in *True Spouse of Christ*, Chap. VIII, Sec's. 1-11) in prescribing the requirements of modesty, which some people in "good society" still follow, while others sneer at it, says: "A religious must practice modesty in sitting . . . she must avoid every slothful posture and must abstain from crossing her feet and putting one leg on the other." (Day's *Monastic Institution*, p. 266.)

In Rome, at one period, "their sexual delicacy was indeed extreme, if the anecdote of Manlius be only moderately authentic. This patrician and senator had only inadvertently saluted his wife in the presence of his daughters, and for this

indulgence he was by the censors accused of indecency. After grave deliberations on the corruptive tendency of such open osculation to the rising generation they struck him off the list of their order." (*Woman, Past and Present*, 29. Lecky's *Hist. of European Morals*, v. 2, p. 300.)

In a publication at the end of the 17th century, this statement is found: "This world too much allows nakedness in women. * * * * The faulty abuse is strengthened through a long use, and now passed into a custom so general that it has become common almost to all women and maids of all sorts of conditions. * * * * Even at the foot of the altar and in the very tribunals of penance," they came. "half-naked!" The protesting priest begs that they "at least make some difference betwixt the house of the Lord * * * * and those which are profaned by the libertinism of the age." (*A Just and Reasonable Reprehension of Naked Breasts*. Lond. A. D. 1678.)

In the portraits of that period we find ladies of quality freely exposing their entire bosom. A modified remnant of this custom is found in the evening dress of our fashionable women, by which some people are still shocked. Now, then, what is the degree of statutory sexual delicacy which limits criminality? Where between the waist and the face, does the statute draw the line beyond which nudity offends modesty? Where is the statutory test of criminality which would protect the accused against such extreme prudery, and why is there any such; is "common knowledge" upon the subject sufficiently uniform to make unnecessary a statutory definition of "obscene."

At the close of the 18th century, we find a book written "*Chiefly on the Profligacy of our Women and its Causes*." As showing what, in the opinion of that author, "tended to deprave morals," we may extract a few sentences. He says: "For the same reason that public schools are proper for boys, they are unfit for girls. * * * Though a girl's ideas be pure as angel's on her entrance into a boarding school, she cannot remain there any time without being as knowing in the ways of pollution as any nymph in the King's palace." Further on our author says: "I cannot bear to see a woman

of fashion sit down to a harpsichord at a public concert and hear her clapped by strangers on finishing her tune." The reading of fiction is denounced because "novels are full of warm descriptions run entirely on the subject of love," etc. Upon the subject of having a male physician attend upon a woman during child-birth, this author says that "the practice is repugnant to every idea of modesty, delicacy and decency. . . . To suppose any more art necessary than what can be taught by experience, would be to arraign the goodness and wisdom of the Almighty. . . . *Infamous as the adulteress is, her crimes admit of extenuation, and she seems pure when balanced against the pretender to modesty who sends for a doctor to be digitated.* Shame on so abandoned a practice," etc., etc. (*Thoughts on the Times*, (A. D. 1779), p. 85-94-199.)

To the same effect see "*Man-midwifery analyzed and the tendency of that practice exposed.*" Lond. 1764.

Here then are men who admit that they are "pure", and who tell us that to educate women, to allow them to play musical instruments in public, and to have a male physician attend a woman during parturition, or to argue that special skill is desirable at such times, all tend to deprave the morals of those who are open to such influences, and elsewhere he says that not one is beyond such influence. (p. 184 and 190.) On these and succeeding pages this extremely modest author strangely enough writes about the means of inducing sexual excitement, that which would *now* be punished as criminally "obscene."

This same author (p. 73) expresses opinions about the sinfulness of adultery which are logically peculiar, but in practice have the endorsement of very, very, very, many men: "When a married man commits it, [adultery] he throws out no defiance to the world—for the world thinks too lightly of the offence. He makes no sacrifice of character. A man cannot sink to the level with an adulteress till he has forsaken his post in battle. Courage is the male point of honor—chastity the female."

Montegazza (in his *Anthropological Studies*, 1886, p. 110) tells of a sex-pervert of the kind called "shoe-lover"—in

this case a special form of masochism. "His nightly dreams were of the shoes of beautiful women. He considered the exposure of ladies shoes in shop windows immoral." (Requoted from, *Psychopathia Sexualis*, p. 130, seventh edition.)

In point of its extreme delicacy the foregoing finds a parallel in the case of a woman of national prominence in the W. C. T. U. who recently was reported as having used these words: "Our purity crusade will be directed against the perils of immodest dressing. Open-work has its place, but the place is not the public, and it is seen altogether out of place. The openwork stocking is full of danger to the purity of the youth of our land." (Newspaper item.)

The logical necessity is that to the "shoe-lover" an advertisement with pictures of ladies' shoes "offends modesty" and would by such be deemed criminal, if applying present judicial tests of obscenity. A fashion paper tempting women to wear openwork stockings must, to such a woman, be "obscene" under the judicial "tests" because she believes that it "tends to deprave and corrupt those whose minds are open to such immoral influences."

As portrayed by an epistle supposed to have been written by Clement of Rome, one of the early Christian ideals of modesty was indeed extreme. The brethren and holy sisters and maidens must not look at one another nor allow the naked hand of one to touch the uncovered hand of the other. (*Two Epistles Concerning Virginity*, vol. XIV, Antenicene Christian Library, p. 384.) Is this conception of modesty a matter of "common knowledge" and incorporated in the statute? If not where and what are the statutory criteria of guilt, which exclude it?

In other places these conceptions of modesty were strangely blended. "Women will scarce strip naked before their own husbands, affecting a plausible pretense of modesty," writes Clement of Alexandria, at the close of the second century, "but any others who wish may see them at home, shut up in their baths, for they are not ashamed to strip before the spectators as if exposing their persons for sale. The baths are opened promiscuously to men and women. Cyprian found it necessary to upbraid even virgins vowed to chastity

for continuing the custom of promiscuous bathing in the nude." For others such promiscuous bathing was the custom. (Ellis's *Psychology of Sex*, (Modesty), 19 and 20.)

"When we are told that the monks of the convent of Mount Athos accused the monks of the convent of a neighboring island with falling away from grace because they allowed hens [because being of the female sex] to be kept within the convent enclosure, we may well believe that Origines and his monks [who castrated themselves] felt that they were gradually ascending in grace when they submitted to this sacrifice." (*History of Circumcision*, p. 89.)

With only a few more illustrations as to the diversity of human notions about modesty this essay must be closed. Dr. Havelock Ellis tells us of a ballet girl who thought it immodest to bathe in the fashion customary at the sea shore and cannot make up her mind to do so, though of course, she every night appears on the stage in tights. (*Psychology of Sex*, (Modesty) p. 47.) Which of these conceptions of modesty does "common knowledge" compel us to incorporate in the statute?

"A Chinaman, who lived in England some years since, acknowledged that on his first arrival he felt some difficulty in restraining himself from rudeness to women if left alone with them, and a nun that had been reared in a convent on her first escape from it imagined that every man who had opportunity would assault her virtue." (*Woman, Past and Present*, p. 212.)

With the Chinaman, accustomed to nudity, secretiveness by the use of clothing induced greater lasciviousness than nudity would evoke. The nun through perverted education expected lascivious designs in others when they had no existence.

Likewise Prof. Andrew D. White tells us that: "At a time when eminent prelates of the Older Church were eulogizing debauched princes like Louis XV and using the unspeakably obscene casuistry of the Jesuit Sanchez in the education of the priesthood as to relations of men and women, the modesty of the church authorities was so shocked by Linnaeus' proof of a sexual system in plants, that for many

years his writings were prohibited in the Papal States and in various parts of Europe where clerical authority was strong enough to resist the new scientific current." (*Hist. of the Warfare of Science and Theology*, v. 1, p. 60.)

Now, one may with impunity discuss the sexuality of plants, but a publication of the writing of Sanchez and others like him has landed good men in jail, though it was done for the best of motives. (Queen vs. Hicklin L. R. 3Q. B. 369,—U. S. vs. Price, 165 U. S. 311.)

Krafft-Ebing tells of a person so sex-sensitive that in the presence of ladies he thought every expression he made was an offence against decency. Thus, for example, he thought it very improper in the presence of ladies, married or unmarried, to speak of going to bed, rising, etc. (*Psychopathia Sexualis*, 75.) May the statutory "obscenity" be determined and a verdict of guilt found by such persons, and if not why not?

"I have several times observed in hysterical females scruples relative to the satisfaction of natural needs, to the action of chewing, eating, micturation, defecation, which have all come to be regarded as revolting acts, which must be dissembled like crimes." (Moral Hypochondria.) (Fere, *Pathology of the Emotions*, p. 389.)

The present law does not in the slightest degree protect one accused of obscenity from the whim and caprice of judges or jurors who may be thus afflicted with extraordinary sexual sensitiveness. Even the "tests of obscenity" created by judicial legislation leave the criteria of guilt just as much in doubt.

By evidences gathered from similar sources it can be demonstrated that there is not one single fact of obscenity concerning which all humanity is agreed. Even what is to us the most revolting "obscenity" is not so to all persons. Every known form of sexual perversion, from sadist, lust, murder, up and down, has been credited with the endorsement of some god and practiced and sanctified by some religious society. Those who want proof of the fact need only to make themselves fairly expert in sexual psychopathy, and then study all the facts of sex-worship among the ancient Greeks

and Egyptians, also the old initiations into the priesthoods of the native Mexican religions, and the sacred snake dance among the Moquis. If proof is wanted as to its expression in art, we have it in the secret Cabinet of the Museum of Herculanium and Pompei and other places. If doubt still remains it only becomes necessary to get the confidence of one whose sexual impulse has become completely perverted, and ask such a one about his shame when indulging only in the presence of those who are perverted like himself.

Within the limits of a magazine essay one can only hint at the source and character, of the evidence which contradicts the judicial dictum upon the questions of science here involved. To exhaust the evidence would require a republication of volumes of ethnographical research, and most of the literature upon sexual psychology. The principal books upon the latter subject are listed for further study.

Psychopathia Sexualis by Krafft-Ebing.

Suggestive Therapeutics in Relation to Psychopathia Sexualis, Schenk Notzing.

Morbid Manifestations, by Tarnowsky.

Studies in the Psychology of Sex, by Dr. Havelöck Ellis, and especially that volume devoted to "Modesty." This literature, by exhibiting the infinite variety of foci about which centre the sentiments of modesty, prove to a demonstration that we have no innate sense of modesty, nor any common standards by which to determine its opposite, nor any uniformity in the ideas which excite in us those emotions of aversion which constitute our conviction that a book or picture is obscene. Furthermore it can be and soon will be shown that the judicial and official conceptions of modesty, even within Christian countries and within modern times, are almost as variant as those revealed by ethnographic and psychologic researches. (See *Varieties of Official Modesty*. Am. Jour. of Eugenics, Dec., 1907.)

From all this it follows conclusively that the judicial assertions quoted near the beginning of this essay are not true in fact. While every man may have *some* emotional experiences which are the essence of a personal judgment of modesty and obscenity, yet it is always peculiarly a matter

of his own individuality, and affords him no rational basis whatever for determining what another person will consider obscene except upon the theory which is now proven erroneous, that in this matter we are warranted in assuming that our thoughts and emotional associations about obscenity and modesty are identical with those of all other persons. If, as is now demonstrated, it is not true that we may assume every one to agree with us as to what is obscene and what is not, then it must follow that no man can tell just what the legislators intended to include within the meaning of the epithet "obscene" and therefore it is untrue that "these are matters which fell within the range of ordinary intelligence."

In a paper presented before the XV International Medical Congress I pointed out the reason for this impossibility by showing that the only elements of unification which are generalized by the word "obscene" are subjective, and that therefore those elements are contributions of the contemplating mind and not inherent in the thing contemplated. That essay is reprinted in the *Albany Law Journal*, July, 1906, and in *Freedom of the Press and Obscene Literature*, published by The Free Speech League, 120 Lexington Ave., N. Y. City.

The legal consequence of these scientific facts is that the present criminal statutes against obscenity do not so describe the acts penalized as to make it possible for persons of ordinary intelligence to know in advance, from a mere reading of this criminal statute, whether every proposed conduct is a violation of it or not; and furthermore every conviction under this statute, because of its uncertainty, is according to the *ex post facto* whim and caprice of the court or jury not according to the letter of any general law. For these reasons and others I conclude that our present statutes against obscene literature and art are an unconstitutional delegation of legislative power conferred upon juries; that convictions under these statutes violate the constitutional provisions against penalties by standards erected *ex post facto*, and are not according to "due process of law." (See "Concerning Uncertainty and Due Process of Law," 66, *Central Law Journal*, p. 2; "The Scientific Aspect of Due Process of Law and Constructive Crimes," *Am. Law Review*, June,

- 1908; "The Historical Interpretation of 'Law' " in *The Albany Law Journal*, April, 1908; " 'Due Process of Law' in Relation to Statutory Uncertainty and Constructive Offences," published by The Free Speech League, 120 Lexington Ave., N. Y. City. Also: "Constructive Crimes Defined" in *Central Law Journal* for August, 1908.
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EDITORIAL.

[All Unsigned Editorials are written by the Editor.]

A WOMAN'S PERJURED TESTIMONY AND A DOCTOR'S DANGER.—Experienced judges in courts of justice have often discredited woman's uncorroborated testimony while some state laws accept the woman's testimony as convincing proof of paternity in certain cases wherein she is concerned. Here follows a staggering record of a woman's inability to appreciate or care for consequences of her lying and of her capacity to prevaricate even unto death. Yet petticoat biased erotopathic emotional juries are sometimes found who can see no guile in woman and only Gospel truth in her testimony against a man. "A reputable physician of Detroit, Dr. E. L. Emmons, was called to visit a patient whom he had never visited before," says Dr. E. S. McKee, "in a boarding house. She had a cold, for which Dr. E. prescribed. Some time after he read in the papers that this woman had accused him of procuring an abortion on her. She was a janitress and was found by another physician suffering from sepsis, due to a

blundering attempt to procure an abortion. Another physician was called in and the patient removed to a hospital. The prosecutor's office was notified and the assistant prosecutor and a stenographer hastened to the bedside to take the ante-mortem statement. The priest having administered the last sacrament. Facing death and in the presence of several witnesses, she said that Dr. Emmons had performed the operation, named the time, the place and the fee. But she did not die. A month later the case was brought to trial and instead of the ante-mortem statement, the woman herself was on the stand. On cross-examination she broke down and admitted that Dr. Emmons knew nothing at all about the case or her condition.

THE PRICE OF PURE MILK is "eternal vigilance", (as John Adams said of Liberty), on the part of sanitary authorities and people. When chefs shall be required to learn and apply pure milk tests before using or serving the lacteal fluid, it will take some of the conceit and independence out of the former and impurities out of the latter when put on sale, thereby preventing much needless infant and considerable adult mortality.

VIVISECTION WITHOUT SYMPATHY for animals should be CONDEMNED and regulated by law. Pure scientific physiopathological aims may be accomplished, not without killing or maiming, but without painful brutality. Consideration should be had for the animal as well as for the aims of scientific investigation in the biological laboratory.

All callow youth aimless experiments, just to see what a maimed and tortured animal would do, should be prohibited.

The disregard of the animal's feelings, frightening him by binding, maiming or cutting him while he is conscious of what is being done with him should be done away with. They hurt the animal and the operator by developing latent savage brutality in the latter. The indifference to suffering in the Weber experiment of the Cæsarian section on a bitch and laying the thus extracted puppies before the dog mother to see if she would show the same affection for them as if they had been born in the natural way, is useless and if the cutting

is done without anæsthesia is exceedingly brutal. Cutting away the ears and paws of a confiding dog to see if his love for the hand that has reared and petted him (as Spanish matadors spear hand-fed bulls) to see whether confidence and love would turn to distrust and hate and be rewarded by seeing the faithful animal even then lick the hand of destruction, is useless to science and demoralizing to man and pitiful in behalf of the dog, for of all domestic creatures the faithful dog exemplifies toward his master the psalmists confidence in God—"though he slay me, yet will I trust in Him."

The evisceration of the brain, as in Pfluger's experiments, a little at a time, while the dog is unconscious and the paralytic sequences noted, without causing either psychic brain shock to confiding animals or great pain is not brutal; the same is true of the cord or medulla experiments. Nature makes these experiments for us in the diseases and traumas she inflicts both on man and animals, but we need not imitate nature's unfeeling, unsympathetic violences since we may almost completely avoid both the mental and the physical pain of biologic experimentation. But even Nature in her most violent traumatic assaults upon man causes simultaneous obtunding or comatose unconsciousness, so that in great violences, if one survives, one does not know what has hurt him oftentimes till long after medical relief comes.

A rightly regulated vivisection on lines of humane consideration of the lower animals seems essential to man's progress in the understanding of himself, but marked and heartless cruelty in laboratories of biological research not only justly promote sympathetic opposition, but tend to arouse unwarrantable antagonism and place obstacles in the way of true scientific and humane advances in knowledge for the welfare both of humanity and the good of the lower domestic animal life. The antitoxic serum which saves so many lives requires but slight pain in its securing. The horse seldom winces under either the hypodermic of toxication or withdrawal of blood for anti-diphtheria and acute pneumonia sera, etc.

This itself should be a silencing argument against the anti-vivisectionists, for much of the really necessary vivisection

can be done and in many laboratories is done under no greater pain to the animal.

The life of the animal is not so much to be considered as its suffering under experimentation. This in our day can be largely avoided, as the suffering of human beings undergoing surgical operations can, though surgeons are not always as careful as might be as to the mental shock of announcement of preparation and after-treatment. The psychic violence of the glittering knife, the tray of instruments, the gowned nurses and the other appurtenances of the operating room, had better be kept from the patient's vision until after the operation is safely over and the mind is in condition to withstand the details of the surgical procedure.

MEN WHO MISTAKE INSANITY for an error of reason and act, or both, readily find a streak of insanity in any speech and singularity of conduct. To them "all men are insane, their insanity differing only in degree," "such thin partitions do the wits of the sane and insane divide," etc. Such alienist experts, were Cain on trial before a modern court, would pronounce that murderer a victim of fulminating homicidal impulse, a brain storm or imperative conception. The insane make such displays, but when they do, their psychic spasms are the product of resistless propulsive disease and not of rationally but viciously evolved passion, excited by a motive to violence. To the true alienist the line of demarkation between violent, reckless, vengeful, motive moved, murderous passion and the psychlampsia of brain disease is ordinarily clear enough. The true student of morbid psychology does not mistake them.

The pseudo-psychological expert and the dilettante may and often does mistake them.

CLEAR WATER.—"On the bank of the lower Schuylkill, where the test plant is situated, the water is repulsively filthy and unclean. According to the tests of Dr. D. Rivas, assistant bacteriologist of the city of Philadelphia, it contains 2,500,000 bacteria to 20 drops of water. The liquid, brown and clouded with mud and sewage, before the eyes of the party

was pumped into the filtering plant and caused to pass out in a steady stream of clear, sparkling water."

The Schuylkill water looks pure. The Mississippi water distributed in St. Louis is now not only clear, but it is pure and free of hurtful microbes. Now secure us clean ice, carried cleanly covered and not dragged on microbe infected pavements and floors, free the streets of dust and clean up or clean out the delinquents of the city legislature, give us clean food and clean legislators and the million prayer of the merchants will be answered.

THE THIRTY-FOURTH ANNUAL MEETING of the Mississippi Valley Medical Association will be held in Louisville, Ky., October 13, 14, 15, 1908, under the presidency of Dr. Arthur R. Elliott, of Chicago.

The McDowell button, reproduced in bronze will be the badge of membership.

TWICE EACH WEEK FOR A FEW MINUTES EXERCISE in the open air of a jail yard is not enough for even a vicious and perhaps insane life-sentenced murderer, though such was the decision by the warden of the Missouri Penitentiary in regard to a negro prisoner who left his place in the lock step line, grasped the convict in front of him, pulled his head back and cut his throat, also attacking and injuring another. This man in the four years he has served, has badly injured four others. The place for such a man is under safe surveillance, as in a vicious ward for dangerous lunatics, not in a shoe shop where weapons can be had.

This man is probably insane and better fitted for isolation in a criminal lunatic asylum than a dungeon cell with only two brief intervals a week for outside exercise and air. Such cases should be supervised by non-political alienist experts of real experience and placed in the insane annex, free from knives and weapons and otherwise constructed and managed for safety from violence, which should be attached to every penal institution.

MURDEROUS PROPENSITY is too often the result of brain defect or disease in the criminal classes, to be subjected only

to the vindictive correction applied to the wilfully and healthy vicious. Morbidity should always be suspected and inquired into with expert psychological judgment in our penal institutions and treated accordingly, where apparently motiveless violence appears.

THE LIFE-CONDEMNED MURDERER should be given a chance to live out the natural term of his sentence whether sane or insane, without life shortening solitary confinement.

Our jails, police holdovers and other places of penal restraint are too unsanitary anyway. Places of penal confinement should be places of sanitary reflection for penitence, not for life shortening by tuberculosis or for such agreeable diversions and company as crowd out of the mind all penitential reflections. A little more psychic science and less politics in our penal establishments would be more salutary for the erring citizen and to the good of the state and non-criminal people.

HARDIN, THE EDITOR of *Die Zukunft*, who exposed the camarilla about the Kaiser, is reported as saying that abnormal men must not be imperial advisers, nor help to direct the destiny of the German nation. "So say we, all of us."

Morbid erotism emasculates the higher manhood and abnormal men should have no place in the rule of any people.

MR. BUSCH AND MR. LINCOLN'S SALOON RELATIONS.—To one who had the pleasure of knowing the great and good, martyred President Lincoln it is extremely painful to read Mr. Busch's unkind, untimely and unwise effort to ally the dead President's early life with the brewery interests of to-day.

The sentiment and custom of the early days of Abraham Lincoln relative to alcoholics were vastly different from now. The poisonous potency of alcoholic drinks were not then, as now, so well known and good and educated men were not then so intelligently desirous as now to restrict the alcoholic beverage habit.

HOMELIKE HOSPITALS FOR THE INSANE are becoming more general than in decades that are passed. The old foggy parsimonious, pseudophilanthropist directors, who thought

beautiful adornment of premises and grounds for the insane was extravagance and folly, have nearly all passed away. A few more funerals will finish the yet remaining ones. Some of the hospitals are illustrating their beautiful grounds, dining and sleeping rooms, corridors, amusement annexes and work shops, recreation grounds and chapels in their reports. The more the better for the enlightenment of the people on the present day provision for the insane. The writer of this was the subject of a charge of extravagance for having strips of carpet on the floors of each bedroom, the manager making the indictment saying he "did not even have that luxury himself," as though insane persons were not entitled to reasonable and sanitary home comforts. Basement meal tramways were also objected to by the same intelligent sie! gentlemen because it was deemed cheaper to carry hot coffee, soups, etc., across the yards in cold weather on the heads of negroes. One old bachelor manager who subsequently died of pneumonia, brought on by whiskey and the leaking roof of his domicile over a blacksmith shop, to the forge of which he went to warm on cold mornings, he being the owner, objected to the amount of soft soap we used and the quality of dresses allowed certain of the patients, though the dress was described as an essential part of the treatment and contributed materially to bringing about recovery as satisfactory environing influences of other kinds are usually psychotherapeutically salutary.

"PHARMACEUTICAL HOUSES are becoming more modest, they are having much more consideration for the profession and are not so insistent on telling the physician the remedy that he must use and the exact method of its administration as formerly. Less secrecy, more candor and a clearer co-operation will result from this reaction, and all concerned, including the patient, will be benefited thereby." (F. M. Pattinger's address on Ideals of a County Medical Society, *Southern California Practitioner*.)

The proprietaries are talking nearer the line of propriety in propounding the virtues of their specialties and are not trying so hard as formerly to exceed the newspaper quacks.

Give us the exact proportions of the essential ingredients,

combine them as elegantly and palatably as you please, gentlemen of the proprietary pharmaceutical guild, and the medical profession will do the rest.

A POSSIBLE MEDICO-PSYCHOLOGICAL FACTOR IN THE CASE OF COLONEL STEWART.—The sequestration or so-called exile to posts of innocuous desuetude away from contiguity with army fraternal companionship may have more of a medico-psychological aspect than the President or Colonel Stewart's friends may have considered.

Senator Raynor's proposed inquiry might well include a possible psychopathological inquiry and the strenuous President himself, who possibly may never think of neurasthenia or an insanoid inheritance, might well inquire whether Colonel Stewart is encephalologically and psychologically stable.

The Colonel's irritability and disharmony, etc., with his companion officers may have a psychopathic basis, inherent or acquired. How about him? How and why did he rise to his present position? Was he always as now, while rising from his lieutenancy? Was he built that way or has he developed in brain instability with advancing years? Has he been really persecuted or are his psychic neurones pathically unstable, evolving delusion of distrust and dislike and persecution by his fellow officers?

Has the President made a correct and humane diagnosis and prescribed the right remedy in rest and sequestration for the good of the Colonel, his family, friends and the service, like a good humane physician to a mind overwrought, or has he, as Commander-in-Chief, acted with inconsiderate, autocratic severity not justifiable in time of peace? This is the psychological question.

To this complexion must the subject come at last. The President appears to have been right in the Brownsville colored troop affair—right for the discipline of the American army and the honor of the American soldier. Is he right in the case of Colonel Stewart or is there an overlooked psychological aspect to the case? An inquiry into Colonel Stewart's psychoneural health and the state of his liver and stomach for the past several years might be in order.

THE PHYSICIAN AND THE PUBLIC.—Dr. E. S. McKee remarks in Cincinnati *Lancet-Clinic*: "The *Leipziger Verband* is an organization to champion the material interests of physicians. This has changed mightily the standing of the medical profession in Germany. Formerly the German doctor was a backward, unobtrusive, half-starved individual, much of whose life was given up to a fruitless pursuit of some scientific fact and the rest to keeping body and soul together and keeping the general public from finding out how very poor he was. By means of the *Leipziger Verband* and its many branches throughout the Empire the physician kept up a certain amount of publicity, popular addresses, essays and a plan of education of the public. The medical profession must have its representatives in politics, in belles letters, in art, in music, and in all that goes to make up what we term culture. Germany has seven physicians in the Reichstag and seven in the front rank of literature. In local political affairs the physicians of Germany, like their confreres in America, have never taken a leading part, the legal profession having there also a seeming inherited monopoly of all influential positions. A notable exception to the want of influence in political matters on the part of physicians in Germany was the instance of Virchow.

"The power of the press is mighty. It exceeds that of the legislature. What we shall do with this great force, how we shall use it and not abuse it, is an important question. It can undoubtedly be of great service to medicine, but not through abusing and villifying it nor by being too secretive concerning it with our deliberations and our discoveries. What the press wants, and must and will have is the news and the proper news from medicine should be properly supplied to it.

"The Munich branch of the *Leipziger Verband* has a press committee which has done good service. They have not found it difficult to get on good terms with the lay press, but it is advisable to have a middleman, a medical man trained in journalism, best of all a medical adviser, as collaborator on the influential dailies. In large papers the editorial department is entirely separate from the advertising, and the editors have been willing to publish articles calling attention to

the fraudulent claims of nostrums. This has been most successfully done by the Carlsruhe Board of Health, an institution of non-medical origin. Medical sensations, new discoveries, should be carefully reported in the lay press, as they are generally garbled, misrepresented, and cause false hopes and disappointment, which result in increased mistrust of physicians. Progress in medicine should, according to this *Leipziger Verband*, be carefully written up for the public press, thereby enhancing the prestige of the profession, but new methods should not be heralded until they have been carefully proven. The writer of an article to popularize medicine should ponder well its various effects on the sick and on the well, and the possibility of misconceptions. Medical conventions should be written up for the lay press in a neat and attractive style by a medical man, not by a young reporter. This should be done with the view of imposing respect for medical research in general and for the laborious duties of the physician, thus serving both the cause of the profession and of science. Popular lectures to educate the public in medicine are good in their way, but the lecturer must be careful that he does not train up quacks by his labor. In the question of hygiene the voice of the physician should be always heard, even though unasked. In all matters affecting the public health they must give notice of their importance with voice and pen and deed.

ST. JOSEPH MISSOURI INSANE ASYLUM was struck by lightning on the morning of June 10th and slightly damaged by the fire that followed. The fourteen hundred patients were not moved and the fire was controlled by the officers and attendants. The lightning entered the building through the light and telephone cables just as our house was struck several years ago.

THE MIRACLE AT THE TOMB of B. Francois de Paris as presented and discussed from a neuropathological standpoint in the July *Medical Record* will prove interesting reading to the readers of the *Alienist and Neurologist*.

AN ALIENIST FOR THE ST. LOUIS CITY HOSPITAL observation insane ward is the wise recommendation of Dr. Kirch-

ner, the Superintendent. He also recommends a steadily employed plumber for this department. This is good sound psychiatric judgment. The physician who is to observe and the plumber or carpenter who is to work about the premises of the insane, as well as the engineer and others, should know how to approach the insane or be where they are with the least possible irritation to them.

Here is a field for young medical men willing to take service first in a hospital for the insane and thoroughly study the varied and varying phases of insane and insanoid states with a view to diagnosis and proper disposal and treatment of this mental malady. Every city hospital should have a properly constructed insane and insanoid observation department. Not a mere place of barbaric detention cells or dungeons without modern bedroom comforts toilet conveniences or attached recreation grounds or corridors.

THE EIGHTEENTH CONGRESS of French Neurologists will be held at Dyon from August 3 to 9 next. The Congress will chiefly discuss "the diagnosis and clinical types of neuralgias, mental troubles due to defective function of glands possessing an internal secretion, and the treatment of mentally defective children."

THE BATTLE CREEK SANITARIUM sends out the following queer query:

"Dear Doctor:—Where do you send your real sick patients who need careful examination, assiduous medical care, quiet, skillful nursing, a cheerful, optimistic environment, a good climate, thorough physiological treatment and graduated health training?" advertising that the "Battle Creek Sanitarium is such a place."

If the *real sick* are all to be taken from the home doctors and sent away from their care to this big overgrown institution with one chief surgical head and its routine, mechanical methods, what is to become of the home practice of medicine and the real sick who need the constant personal, sympathetic, suggestive and administrative attention of their home physician in whom they trust and confide?

The real sick ordinarily need near-by-home or home-hospital treatment, especially if acutely sick.

Doctors in every community should get together, syndicate their efforts and have good, home-comfort neighborhood hospitals with all modern conveniences and appliances for the care of their sick under their own personal supervision and care. Only such patients who need change of air and environment for psychotherapeutic reasons should be sent out of their home neighborhoods.

There are reasons especially for sending the nervous, insane and insanoid to distant sanatoria, but not for ordinary patients where adequate home provision exists or can be provided.

DRS. THOMAS A. EDDISON AND MARY BAKER EDDY.—Between Thomas A. Eddison's idea that the brain can sustain itself on four hours' sleep and Dr. Mary Baker Eddy's pronouncement and practice that disease and pain are misconceptions of mortal mind and non-existent and the so-called "new thought" (though very old) and other mind and soul cure practices, there is not likely to be much left for the regular practitioner to do among the psychically unstable.

The insanoids are going a grade further in their "demifous" progress and trying to heal each other.

This Eddisonic idea of accustoming one to do without sleep, recalls the modern fable of the cow and the farmer, the latter gradually withdrawing some of the cow's rations, day by day, expecting to accustom the cow to live without feed or fodder, till one day he found his cow unable to get used to the habit of gradual reduction and dead—the timely and adequate repair of the animal organism, superior or inferior, by rest and food and air and sleep must be provided for or a failure of vital capacity for continuance of function will sooner or later come on, before the actual age limit of action and endurance is reached.

It is therefore quite apropos that the President of the A. M. A. should, in his address, have made a plea for public enlightenment on matters of medical science.

PRESIDENT HERBERT L. BURREL'S THEME, the education

of the public in scientific medicine, was very timely and in conformity to the requirements of the code of ethics which enjoins enlightenment of the public.

The present need of education of the public, as the address sets forth, is certainly great. This duty to the laity has been too long neglected.

A TYRANNOUS COURT DECISION relative to expert testimony. Verdict reversed because alienist was not forced to testify.

Jefferson City, Mo., May 19.—William H. Bell, who was convicted in Kansas City on charges of forging money orders on the Pacific Express Company and sentenced to two years in the Penitentiary, will have another trial, as his case was reversed by Division No. 2 of the Supreme Court to-day, the opinion being written by Judge Gantt.

The case was reversed on the ground that the trial court erred in refusing to compel a physician, who was on the stand, to express an opinion as to the sanity or the insanity of the defendant until he had been paid a fee.

This is a remarkable decision. Expert medical opinion, acquired at a cost of great outlay of time and money, is to be forced from an opinion witness without remuneration at the dictum of a trial judge in the face of the constitutional provision that "private property shall not be taken for public use without just compensation."

The laws should provide a reasonable compensation in cases requiring medical expert testimony and courts should compel, on penalty of reversion, the introduction of medical expert testimony in all proper cases.

Judge Gantt's decision would be reasonable had he reversed on the ground that the benefit of suitable expert testimony was not given, but to reverse on the ground that it was not compelled without pay, is violation of an opinion witness' constitutional rights.

We are just now having enough tyranny in this lauded "land of the free" without the courts joining in the oppression.

THE PERIL OF THE BIG NAVY GUN in ruptured ear drums and damaged eyes and brains behind them is more than from

the enemy in front of them. Some device must be adopted to prevent damage to the gunner from the great air concussion of the twelve inch cannon, especially when ten or twelve are fired simultaneously, as in the Dreadnought's practice. Experienced navy officers prophesy that it will be absolutely impossible to work ten or twelve 12-inch guns simultaneously in battle. In accuracy and weight of metal discharged, the recent Dreadnought trials were a triumph. The result looked well on paper. But no public report has been issued concerning the price paid for the triumph.

During the firing trials men were carried below utterly incapacitated through vertigo—stunned and insensible. As long as a few big guns were fired the effects were not felt. But the first attempt to keep up a rapid fusillade from all twelve guns produced what was described as a "storm" which played worse havoc among the crew than a possible enemy's shells.

Even men who were not incapacitated complained that their nerves and vision were so badly affected that it was useless to continue firing.

Here is the same old story of blunder of sanitary ignorance as has prevailed too long in naval architecture and practice.

The saving of the health and vigor of men who man the guns is as essential as the quality and potency of the gun. Success and the Golden Rule are both involved in the care of the men who man the man o'wars men from officers to boatswain, as the welfare of the entire nation depends upon its psychical and physical sanitation.

THE RIGHT OF THE ARRAIGNED TO HIS OWN CHOICE OF MEDICAL EXPERT.—*The New England Medical Monthly* has a sensible editorial on the subject which we quote in part:

"The action of the New York State Medical Society in presenting to the legislature a bill authorizing the appointment by the court of a corps of medical experts, selected by a medical society, will no doubt elicit much comment and discussion. Some such procedure has long been under consideration, but whether this one will prove a happy solution of present difficulties, remains to be seen.

"We assume that any measure which takes the selection of experts wholly out of the hands of counsel will meet with strong opposition—and for good and sufficient reasons.

"If it be right and proper that the lawyer use all justifiable means to further the interests of his client, it is equally permissible for his medical associate, who occupies a very similar position, to exercise his skill and experience in like manner. When necessary, the attorney should be allowed to call to his aid the physician in whom he has the most confidence, for in default of such help, he would be seriously handicapped in the direct and cross-examination of witnesses and his plea to the court and jury.

"It is extremely difficult to eliminate the political element from such appointments and the selection of unsuitable men for such a position would prove a grave and even lamentable experiment."

Some physicians would more likely be non-partisan if selected by the court than if employed by counsel, but all should have a fee for their opinion before going into court. But a jury of experts selected by the court is not giving the party concerned the selection of his own witnesses and the complete pleading of his own cause.

THE WISTAR INSTITUTE of Anatomy and Biology appeals to physicians and surgeons for co-operation in securing human embryos for scientific investigations.

It begs assistance in placing this material in the hands of embryologists who will make good use of it.

Its museum serves as a depository for anatomical materials which may have served the purpose of one investigation and are to be stored for future study.

In one month's time in a great city, more human embryological material than exists in any collection in the world, goes to waste.

For preservation of human embryos, including membranes, the institution advises a mixture of one part formalin and nine parts water and to never place an embryo in pure water; it damages it for histological purposes.

The Wistar Institute will send to your office, on request, a neatly boxed jar, with a quantity of formalin and full directions for preserving embryos. Operations for tubal or extra-uterine pregnancies are likely to yield the most perfect specimens.

Full credit will be given the collector in every case, and specimens will be reported upon promptly. The Institute will gladly meet any expenses incurred.

If you have a specimen for the Institute, telephone Preston 2575 (Bell 'phone), and a messenger will call for it, or you may send it by express to The Wistar Institute of Anatomy and Biology, 36th Street and Woodland Avenue, Philadelphia, Pa.

PRINCE ZU EULENBERG AS A KLEPTOPHILE.—It is said that Zu Eulenberg, of Berlin round table notoriety, exposed as one of editor Maximilian Harden's unsavory coterie in *Zukunft* and the trial that followed, had a penchant for gathering together a miscellaneous collection of horseshoes, shoe soles, pieces of garden fences and "any other old thing," for undefined motive, explaining sometimes, that these scraps brought good luck, (not however manifest in his exposure).

There may be insanity in this, as there often has been manifest heretofore in others, whose immoral change of character into insanity had been preceded by similar *bizarre* conduct, as in motiveless mania or insanity without kleptomania for useless, valuable or unavailable articles.

The precursory insanoid conduct of the developing maniac is often ungenerously and unjustly judged and good family names blurred by incipient brain disease foreboding insanity, and unjustly condemned by the psychologically unlightened.

The Eulenberg name is one of good repute for generations back. It has given at least one name famous to the medical profession.

THE GRADUATING CLASS OF THE ILLINOIS SOUTHERN HOSPITAL TRAINING SCHOOL FOR NURSES held its First Annual Commencement Exercises in the Hospital Chapel on Friday evening, May 29th, 1908, at Anna, Illinois. Class medals were presented by Superintendent Cohn, diplomas by President H. H. Cohn, address to class by Hon. Wm. N. Bubler.

UNION LABOR TAKE NOTICE.—A union labor child comes into the world every minute without the union label and without the aid of union labor accouchement. And some are twins and triplets. This iniquitous business should be stopped. What right has a baby to be born without the union label? though, it be of necessity a Union baby?

DR. GOULD AND ALCOHOL.—Dr. George M. Gould very justly classes alcohol among the seven deadly sins of civilization.

The United States of America, the United Kingdom of Great Britain and the German Empire consume each between one billion and a half and two billion gallons of alcoholic spirits, wine and malt liquors per year.

Take this record of use and the records of alcoholic destruction of animal organism, eggs of hens atrophied and non-fruitful if laid and hatching attempted in an alcohol vaporized atmosphere. Six per cent of the eggs sterile under alcoholic influence and the hatched chicks of these thirty-three per cent rickety and otherwise defective, the arteries and brain and spinal cord and liver and stomach changes shown by Bevan Lewis and his co-workers. The family degradation and extinction of those like the Jukes and the showing of degeneracy and racial death shown by Morel and the hour for alarm has come.

LEGRAIN'S SCULPTURED PICTURE OF INEBRIETY in the *Literary Digest* shows a rotund and bloated bartender behind his bar indifferently filling glasses of "liquid damnation," while before it lies in the arms of his kneeling wife or other

unfortunate suffering woman, the convulsed and sodden inebriate and behind him stands a weeping, despairing child. On the ground is a frugal cold luncheon which either the child or wife have brought. At one end of the sculptured bar stands a jug which need not be labeled, for its fateful contents can be guessed. At the other end is a vessel labeled absinthe.

There are other and handsome unmarked bottles shown in the picture. But no sculpture nor painting can show the harm of alcohol. It is not before the bar, but beyond it and after, among its victims too greatly harmed to come before the bar, that the ravages of inebriety may be seen—in the hospital, the cemetery, on the autopsy table, under the microscope, in the insane asylums, idiotic homes, alms houses, the jails and penitentiaries, in the hovel, the mansion, and the palace its maudlin speech is heard and crimes are done and where hearts are breaking.

Neither this picture nor that of Mr. George Taylor's temperance sermon in black and white, as Mr. B. O. Flower calls this talented Australian artist's illustrations, "as it was in the beginning," portrays half the psychopathologist knows of the insidious augmenting terrible sequences of alcoholic indulgences.

In this picture a middle aged man, poorly but fairly decently clad with stringless shoes and patched knees, down and oblivious, struggling ineffectually to rise, a worn hat and broken bottle near him, while a well-clad boy is drinking dregs from his pitcher of beer. All on the sidewalk in front of the ever too convenient bar.

ALCOHOL AND INSANITY.—The last annual report of Supt. Atkins of the City Insane Asylum submitted, declares that of about 950 patients cared for during the fiscal year, alcoholic liquor or drugs figured in 696 cases. Of that number, 217 males and 100 females were burdened with excessive personal or ancestral use of alcohol, while 203 other males and 110 other females were victims of moderate personal or ancestral use of it. Excessive or moderate drinkers numbered 128, of which 23 were women. The fathers of 127 more were excessive or moderate drinkers. The total number of

insane patients whose insanity was traced to excessive or moderate use of alcohol numbered 420 males and 210 females, or 630 in all. Sixty-six owed their insanity to personal or ancestral use of drugs.

NOISE NUISANCE HEALTH PERIL.—The health board of New York has appealed to the police board to aid in combating the noise nuisance of that city. This board very justly attacks the needless harbor boat and automobile horns and whistles and the carting of loose metals. London is also attacking the needless noise of the omnipresent auto.

But the worst of the St. Louis noises is the needless noise of the non-rubber tired early morning meat, bread, milk and ice wagons, and now the villainous noise of the motorcycle and worst of all, the murderous, terrible, bouncing, unbearable thump, thump of the city railway cars, especially at the crossings, and the drunken midnight howlers who infest the South Side and the West End streets with inebriate song and boisterous conduct.

Violent noises develop restless nervousness and insomnia and make the well ill and prevent the sick from recovering.

The transition of the old-time omnibus into the horse drawn street car and now into the ponderous heavy trolley, with its hundred or more passengers, its rush to make up for deficiency in necessary number of cars, has taken place so insidiously that surprisee has paralyzed protest.

Had the present noisy, large, rapid transit vehicles, constantly killing conversation as well as people and keeping the citizens who try to live along their route awake all night, been offered in the beginning, they would have been indignantly rejected. There is no need for these enormous cars. There should be more cars and they should be smaller and made to run with less racket and noise. They could have rubber tires as well as the autos.

The murders of our rapid transit system do not all fall to the deceptive inefficient fenders or negligence.

They are all along the routes of these killing noises that rob of rest and needed sleep and shatters brains and nerves. The well-to-do have left thousands of elegant homes, now the

abode of the poor, who must live down town and along lines of tramways near their work. The well-to-do could not stand the health-destroying, murderous racket. They had the means with which to move and have gone away from central parts of the city residence districts to the suburbs to live, but the poor—God help them!

St. Louis is wisely substituting creosoted wooden pavement in some of its down town congested narrow streets. This should be further extended for sanitary as well as comfort reasons. The next move should be against noisy iron-tired, rattling vehicles and needless factory whistles, etc.

THE NERVOUS SYSTEM AND DIABETES.—The pathogeny of diabetes is not complete with the nervous system omitted. After giving the pathological anatomy and the mechanism of sugar production, Pavy, at the late Lisbon Congress, committed himself to a recognition of the important part which the nervous system plays in the development of this disease, admitting that the evidence from various sides is now too definite to admit of doubt that cerebral action is intimately related to the affection.

Pavy now believes that the vaso-motor system is primarily at fault in this metabolic neurosis, a position taken by the editor of this journal ten years ago in his address on medicine before the A. M. A. at San Francisco.

While this admission comes late and the facts are not new to neurologists, it is gratifying to note this step forward in neuropathologic observation. But readers of the *Alienist and Neurologist* have long been familiar with this fact.

The clinical observation of brain-strain and its glycosuric sequences as in melancholic glycosuria, miscalled diabetic melancholia, is in harmony with the glycosuria results of experimental excitation of the floor of the fourth ventricle, at the origin of the vagus nerve.

ONE TIME HUMILIATION OF NAVAL SURGEONS.—In one of the old vessels of our navy, relates the *American Journal of Clinical Medicine*, there was an unusual amount of sickness which the surgeon justly ascribed to the lack of ventilation

on the berth deck, where the sleeping crew were wedged closely together.

The air at night when the men were in their hammocks was something beyond description. It could only be described as a stench. The surgeon and engineer discussed the matter, put their heads together, and devised a means to overcome the difficulty, by carrying a ventilating shaft up through the captain's cabin. This was in time of peace, and the ventilator at any rate was a temporary matter which could be done away with at a moment's notice if desirable. The only objection to it was that the captain's cabin would have been somewhat disfigured by a canvas tube two feet in diameter, passing from the floor to the upper deck. The scheme was submitted to the captain, who promptly responded by calling the culprits before him and administering a severe reprimand to them, pointedly telling the engineer that his business was to attend to the engines and the surgeon that his duty was confined to attending to the sick, and recommending them to limit themselves hereafter to their duties described in the Regulations. The sickness went on.

During the Spanish war it is said that the line commander of a hospital ship actually put in a claim for prize-money, as having with his floating hospital assisted in the capture of a Spanish vessel. Just what business a hospital ship, for whose functions neutrality is an absolute essential, had in taking part in the capture of a prize, is difficult for the average layman to explain; and this might justly form a subject for caricature.

Since then matters with the medical arm of the navy have changed and are changing for the better. The navy has its own hospital ships medically commanded. A little more manhood persistently asserted by the medical staff of the navy and ignoring medical service therein by the best civilian medical men and matters will be what they ought to be for the medical officer in naval service, commissioned or contract.

A CORRECT NEWSPAPER VIEW of the recently acquitted insane murderer, Harry Thaw, entitled, "Justice in Thaw's

Case," appearing as an editorial in the St. Louis *Globe-Democrat* is so exceptionally correct as newspaper psychopathology, all except the final sentence, that we take pleasure in showing our world-wide readers how intelligently such a subject can be discussed by a St. Louis newspaper editor. We may also here remark that the views of the St. Louis press were psychologically correct upon the subject of Harry Kendall Thaw's mental status as, they were in the famous case of Duestrow and are generally—even on most of the ridiculous unwritten law cases that have lately been before our Missouri Criminal Courts.

"The action in the Thaw case may not settle anything. Trial juries will be subject to as many caprices as ever. The second Thaw jury appears to have been made up largely, if not wholly of sensible men, who were not willing to acquit the prisoner by a form of verdict which would release him, but who were not willing to send him to his death for the killing of a satyr. Their verdict, "Not guilty, because of insanity," was the most just they could have reached. They made no effort to speak of the degree or quality of the insanity. They did not pronounce it emotional insanity, growing out of a jealous passion, and White's betrayal and continued pursuit of Evelyn Nesbit and Evelyn Thaw. They said nothing of it being a temporary insanity, and in view of the evidence taken by the defense during the trial, which proved Thaw to have been mentally irresponsible for years before the shooting, and even proved a pre-natal origin of his complaint, the verdict could only be taken as meaning that, being a lunatic, Thaw was not responsible to the law.

"It is rather strange, in view of the verdict and all the preceding facts and evidence in the case, that there should have been a general public expectation of the prisoner's immediate release by the court. It is matter for congratulation that this low estimate put upon the courts of New York was not justified, and it is now matter for fresh congratulation that the courts of that state have again vindicated themselves and the ends of justice by refusing to release Thaw from confinement in the asylum for the criminal insane at Matteawan. The presiding judge, in deciding that the evi-

dence offered to prove Thaw's present sanity was insufficient, declared that the evidence in the case of an insane convict of such paranoiactal tendency as Thaw is now known to be should be positive and absolute in order to effect a release. Such evidence he decided had not been produced. The decision is an eminently wise and just one, both in premise and conclusion.

"The killing of White by Thaw was an evidence of insanity, not temporary or emotional, but paranoiactal. Granting the truth of all the woman told on the stand, the fact could still not be concealed that Thaw was aware of all the facts before his marriage, and his failure to produce any positive proof that White was seeking, at the time of the murder, to renew his old relations with the woman after she had become Thaw's wife, left him without any plea of emotional or temporary insanity which would convince an intelligent jury. The act was the result of a maniac's brooding over a fancied wrong, and such maniacs are always better in than out of doors. The story that Thaw has already made threats against the lawyer employed by his wife to prosecute her suit for divorce is easily to be credited. Nevertheless, the unfortunate man's application to be removed from Matteawan to some private sanitarium is one which the courts will doubtless consider as offering opportunity for the righteous tempering of justice with mercy. *Whatever prospect of recovery the poor fellow may have is not increased by keeping him in a public madhouse filled with howling, insane criminals.*"

The last paragraph refers to a salutary object lesson which might, if enforced upon Thaw in his youth, as the end to which his erratic willful failure of self-control, might have caused a pause in his willful way to ruin when he was sowing the wild oats of unbridled passionate indulgence, which led him on to the whirlwind of psychic destruction. He is now in the right sort of psychopathic "cyclone cellar" and ought to be permitted to abide there free from the brain storms which were morbid to him in the environment of normal minds.

THE MENTAL MAKE-UP OF THE COLLEGE HAZER is essentially tyrannical—the golden rule is not in his psychic com-

position. In military service he would, as an officer, prove a Martinet—hence President Roosevelt in approving the sentence of suspension from West Point of the eight cadets of the Academy there, has acted with wisdom and prudent foresight on lines of humanity, and the conservation of sound right-headed army official material. The seeds of tyranny should not be allowed to sprout in the kindergarten of our army or navy. Out of hazers grow cruel Martinets. The torturers of Philippine prisoners who lately received a court martial whitewash acquittal are in the same cruel class, unfit to be clothed with the little authority even of lieutenants.

THE TYRANNOUS PERIL OF THE MISSOURI BOARD OF HEALTH.—This remarkable board unlawfully assuming the function of a University Board of Directors, decided (*ex post facto*) lately, after a medical class had been graduated, that it would not admit that class of graduates before it for examination to practice, although it had admitted and passed this same school's graduates every year before.

It assumed that certain equipment was inadequate according to their notion, in the biological department. There were not spigmomanometers enough, not enough vivisection apparatus, not enough turtles, mice, etc., for vivisection, not enough microscopes to suit them, etc., making a clandestine inspection of the college and asking none of the chairs to show their equipment for illustrating their lectures and not inquiring about dissection facilities and learning nothing of the really splendid clinics and anatomical demonstration departments and adjoining hospital facilities of this very complete and reputable school.

This State Board, going beyond its province into the chartered domain of the Board of Directors and exacting what it had no right to require and deciding without previous notification against lawfully graduated students and its own previous record up to date, was evidently influenced by the sinister bias of one man thereon, actuated by a probable personal motive as has been suggested, for one of the board, after the decision to disbar these students, told the writer he

did not know what was wrong with the school and another spoke similarly to another person.

Yet both agreed to join in refusing this school's graduates their rights to appear for examination after they had graduated in a school, up to this time in good standing with it.

This board has disbarred no irregular schools or regular ones of less equipment and has gone after no quacks or quackery in the state. But one man on this board evidently has a personal motive and influence and the regular medical profession of the state have an idea who it is. The president of the faculty of this school has since this wicked event been elected president of the State Medical Association. He is a class instructor of capability and excellence and a surgeon of professionally acknowledged eminence.

This board claimed it was not treated courteously by one of the officers of this school, hence its retaliatory vengeance on the graduates who had done them no harm and had a contract and moral right to be examined under the law as graduates of a reputable school not pronounced disreputable by this remarkable board or notified, till after they had graduated.

State Boards that assume autocratic prerogatives concerning medical schools as to matters strictly within the province of boards of school management and public deprecatory slanders of good and worthy schools, before the courts have had time to prevent them from striking their profession, ought not to be suffered to exist to torture and malign the worthy in the profession to whom fraternal allegiance and honest loyalty is due both in morals and law. State Medical Boards were created to conserve, support and sustain good schools in their efforts and not to annoy or destroy for personal malice or private vengeance. Only the foulest of birds would soil its own nest.

This board when action was taken for mandamus against it, repeatedly responded not ready, the effect of this being to keep the status of this old school and popular school as they had slandered it with its graduates in many positions of civil, public and military life in doubt, before prospective students till too late for this year's registration.

State Medical Boards were made to sustain and not to traduce reputable medical workers, to help and not to harm graduates of good regular schools. They were created to be ethical and kind to their kind, not to cloak malice, revenge, personal interest or other wrong motive, under official opportunity.

They should act like the great school they have sought to slander, whose alumni are an honor to the profession everywhere "not mailed in scorn, but clothed in the armor of a pure intent," and governors who appoint such men, and the great and good profession to which they owe honorable treatment and ethical allegiance, should see that only good right-minded medical men get on state medical boards or failing in this, such inimical clans guised as officials should be abolished. A great surgeon in Missouri once said state medical boards are liable to do the profession more harm than good. His prophecy was correct in this case. Why should state medical boards assume to be charter directors of medical colleges having lawful boards for that purpose anyway?

THE MAIN EFFECT OF MEDICAL LAWS has thus far been to require an examination from all educated physicians, but to allow all sorts of healers to follow their calling without any examination or registration whatever. It is true that legislation has to some extent diminished the number of quacks, but it has not touched at all the great army of so-called healers who do not use drugs or employ surgical procedures.—*Edward Beecher Hooker, M. D.*

THE PHARMACOPŒIA FOR MEDICAL STUDENTS.—The American Medical Association, the American Pharmaceutical Association and the National Association of Retail Druggists together with many state and local organizations and journals in both professions have been for some years endeavoring to bring about a return to the practice of medicine based upon the Pharmacopœia, and by resolution have asked the medical colleges in the United States to have medical students well grounded in materia medica and pharmacognosy, and so forth in the Pharmacopœia.

The Pharmacopœia ought to be taught in all medical colleges not so much botanically as therapeutically and as to composition of official preparations and incompatibles. The invention of new names for old drugs in modified combinations by proprietary houses is deceptive and paralyzing to the student in many instances. Students would not be mislead by many of these if they knew the pharmacopœia well and their medical chemistry better.

A VOICE FETISH on the part of a married woman of Des Moines, Iowa, has resulted in a love avowal reciprocated and two demi fous divorce suits. Here is the associated press record of the silly proceedings:

"The wife of a well-known Des Moines man, fell in love with the voice of a member of the Iowa legislature when he made a speech on two cent fare legislation. He admits he loves and will marry the woman. Both wives have sued for divorce. He would do all in the world to help out the little woman who has made such sacrifice for him."

Amphion built Thebes by the sound of his lyre, drawing the stones into their proper places, but here is the record of the human larynx with power to charm a woman out of her proper place. Here is a woman erotically or erotopathically silly enough to be foolishly charmed away from her proper place with her husband, spreading misery into two households, under the delusion that she is to be happy under the daily sound of a two cent fare legislator's voice.

The sacred writer said "all men are liars," but he did not refer to this very particular human lyre. This singular lyre of the Iowa legislator, of the uncommon kind, with power to charm responsive eroto-sympathetic feminine affinities and "force their spirits from their accustomed course" was not included in the denunciation, though it well might have been. Such erotic, abnormal, unpsychologic, unlawful, cruel love, evidences a degree of psychic instability in the love sphere of mental emotion that can never run smoothly. It is a sort of reckless love that has grief with it and in its wake after the erring parties wake up to a realization of the sense of the mistake they are making, if one or both does not

secure oblivion of their misdeed in dementia and a kindly retreat for the insane.

A lunatic hospital with power of prompt commitment, would sometimes prove a valuable and humane annex to some state capitols. The asylum in Missouri is a little too far removed. It is further removed than Sheridan's ride in the last hour from Winchester town "over twenty miles away."

THE INSANE SUICIDE AND THE INSANE MURDERER are often moved by the same motive to lift an overwhelming burden, apparent or real from the mind. Mental states exist where the unlawfulness of suicide as that of homicide under overpowering impulse, either does not come to the mind, or if it does, it makes no impression. Certain psychopaths have true alternating epilepsy—as their morbid base. They are but epilepsy in psychic form, minus the convulsions—spasms of the mind.

These are motiveless, morbid brain storms, though a pre-existing precipitating cause of brain disturbance may have arisen in the mind when it was in a normal state which changed physiological into a pathological function where morbid predisposition exists.

John Hunter fell into a passion and then into a fit of apoplexy from which he died. Passion may begin in sanity and end in insanity from cerebral hyperaemia, overwhelmed neurones, ruptured milliary aneurisms and other altered brain states, for which the brain has been previously preparing and which may transform a normal passion into the abnormal one of insanity.

THE SIXTEENTH INTERNATIONAL MEDICAL CONGRESS will be held at Budapest from the 29th August to the 4th September, 1909. The General Secretary is Professor Emil Grosz, M. D., Budapest, viii, Esterhazyutcza 7.

THE DOCTOR IN POLITICS, not in the offensive sense, as used by the enemies of the profession's interest, but in the sense that self-preservation is the first law of nature and it is the duty of the physician to take better care of his own and

the public's welfare than he is now doing, by looking after his rights through right place in public service as a citizen meriting as much consideration as the financier, lawyer, divine, commercialist, saloonist, distiller, brewer, real estate man, shoemaker, butcher, baker, candlestick maker, etc. Send Reed to the Senate from Ohio and other good medical men from other states.

OBITUARY.

DR. CONOLLY NORMAN, medical superintendent of the Richmond Lunatic Asylum, Dublin, died suddenly in Dublin last week, in his fifty-fifth year. He was educated at Dublin University, and having acted as superintendent of several provincial asylums was appointed to the control of the Richmond Asylum, the premier lunatic asylum in Ireland. Dr. Norman instituted many reforms in the treatment of the patients in this institution and abolished, with the happiest results, the system of severe restraint and other relics of the old prison methods. He was successively secretary and president of the Medical Psychological Association, and joint editor of the *Journal of Mental Science*. One of Nature's noblemen in the ranks of psychological medicine.—*The Hospital*.

CORRESPONDENCE.

ESPERANTO.

My Dear Dr. Hughes:—I note your little fling at Esperanto in the *Alienist and Neurologist* for May. Have you looked into it? When I tell you that, in discharge of my work, I bought a 15 cent manual last Christmas, read it only in the car between my home and my office, and *inside of three weeks* I had written a 20-page article on "Professional Secrecy in the United States", in Esperanto (which will shortly be published in the *Vocho de Kuracistoy*, ("Voice of the Physicians"), a medico-economic journal published at Lwow, Austria-Galicia); was corresponding with foreign Esperantist physicians, and was reading aloud at home in English, translating as I went on, an Esperanto novel written by a Frenchman, I think you must admit that there is something more in it than food for banter. Esperanto is here to stay. It is easy, logical, consistent, musical and more flexible than any other language in existence—altogether different from Volapuk or any other artificial language. Moreover, it is *philologically scientific*, and its most prominent adherents are to be found among scientific philologists. When one has learnt the few principles of Esperanto, and has a vocabulary of a few hundred roots (not words) *one can construct as one goes on what one has not learned*, and any Esperantist from any part of the world can understand it. Look into it before you write again on it. Yours sincerely,

KENNETH W. MILLICAN,

1143 Sheridan Rd., Aniajo, June 11, 1908.

Our friend Millican has proven himself a remarkably adept scholar. While in Amsterdam last year the editor noticed the chief clerk of the hotel spending his odd moments of leisure in the study. He expressed himself much interested in the study and thought it would become universal.

He informed us that there were others similarly interested and engaged in the study of the new world language.

SELECTIONS.

CLINICAL NEUROLOGY.

GRAVE SEPTICEMIC CHOREA.—B. Sachs, of New York *Medical Record*, classifies chorea as follows: Chorea minor with its evidences of infection; chorea associated with endocarditis and rheumatism; chorea gravidarum; senile chorea; septicemic chorea, in which there is evidence of an infectious origin for the symptoms. Of the last variety the author gives two very interesting histories. This form may occur at any period of life. A prodromal period of restlessness and slight twitchings is followed by a condition of universal choreic movements of violent type, such that the patient must be restrained in a padded bed to prevent self-injury. Speech is difficult or impossible. This is followed by a period of stupor which ends in death. High fever is present throughout, and sleep is fitful or impossible. A universal erythema of toxic form may be present in an early stage. Blood examinations in two cases have shown the presence of septicemic germs. These cases seem to be the expression of a general septicemic condition.

CLINICAL NOTES FROM "*The Hospital*," LONDON.

MENIERE'S DISEASE.—Obstinate cases of this condition, even when all other remedies have failed to give relief, have been known to yield to the use of a seton. The seton may, perhaps, have to be worn for many months.

BABINSKI'S SIGN.—According to Dr. Rudolf, of Toronto, an extensor response, instead of the normal flexor movement of the toes, may be obtained in many healthy people if the test is applied while the individual is sleeping.

LUMBAR PUNCTURE.—Lumbar puncture must only be practiced on a patient who is in bed; and the patient must remain in bed for some hours after the operation. Otherwise vomiting, headache, convulsions, or vertigo may supervene. According to Babinski, lymphocytosis of the cerebro-spinal fluid is absolutely diagnostic of syphilis.

MYASTHENIA FROM PETROL FUMES.—Sir William R. Gowers, says *The Hospital*, has just published an account of a case which he terms pseudo-myasthenia of toxic origin, and which he traces to the continual exposure to these fumes of burned petrol. The patient was an officer in the army engaged in a Government factory, and superintending the construction and testing of petrol engines. The condition commenced with a perversion of the sense of taste, all sweet things having for him a salt taste. This was followed by a constricted feeling in the throat when swallowing. This feeling developed in the course of a few months to a definite difficulty of swallowing anything except bland fluids.

The voice then developed myasthenic characters, becoming feeble with imperfect articulation, especially after a few minutes' talking. The contractions of the obicularis palpebrarum muscles were very weak, and there was little outward movement of the mouth on smiling. The electrical reactions, reflexes, and sensation were normal. The symptoms presented a striking similarity to those of myasthenia gravis. The case suggested to Sir William Gowers the possibility of a toxic cause, and the fumes of burned petrol were the only source discoverable. The condition rapidly yielded to treatment with hypodermic injections of strychnine. After an interval of some months the patient was enabled to resume his work, but in the course of another year the symptoms again returned. Under the same treatment and with abstention from work recovery again rapidly took place, so that the causal connection appears to be pretty well proved. In view of the increasing use of petrol and our present ignorance as to the possible baneful effects of its fumes the case is one of considerable interest.

A CASE OF RESTLESSNESS.—The following, a case

of traumatic restless epileptoid, is the second of two cases of restlessness reported in *The Hospital* by Charles Mercier, M. D., F. R. C. P., Physician for Mental Diseases at Charing Cross Hospital. The second case of restlessness was of a somewhat different nature, but it agreed with the first in disclosing on investigation a much graver state of affairs than appeared from the complaint of the patient.

C. D., a clerk, *æ*t. 35, was knocked down by the open door of a train that came into the station as he was standing on the platform too near the edge. He was struck in the face, and was insensible for about ten minutes. The next day he went to business, but was obliged to return home, being unable to work. He became giddy, and everything seemed blurred. He was in bed for three weeks, and then went away for a week. Since attempting to resume work he has found himself unable to do so on account of "restlessness." He cannot settle to anything. He gets so restless that he cannot sit over his work for more than half an hour; then he has to get up and go out. Since the accident he has been unable to sleep for more than an hour or two every night, though formerly he was a very good sleeper. He suffers also from a feeling of tightness in the head, which is relieved by gripping something with his hands and squeezing it hard. He is very anxious to get back to work, but is unable to work on account of the restlessness and inability to settle down steadily to anything. He often wants to cry.

As I put a question to him, his gaze became fixed and his eyes expressionless; he stared fixedly at a corner of the room; his face became grey; he did not answer. Then he drew himself slowly back in his chair, his eyelids quivering; and at the end of about half a minute, he roused up, his face flushed, and he turned to me saying, "What question was that?" Then he put his face in his hands and began to cry. He said it was "the feeling" again. He often had these feelings, and when a "feeling" was over he wanted to hurt someone. The day before he had given his little boy a thrashing. The boy had told his mother a lie, and would have been punished in any case, but "the horrible part of it was that I took a delight in thrashing him; I felt that I wanted

to hurt him." These "feelings" were always followed by the same desire to hurt some one. The other day he got hold of a cat and nearly killed it. The cat had not offended him in any way. The only means of combating this desire to hurt things is to get up and go out of the house, and then it passes away in a few minutes. This is the secret of his restlessness. The attacks are frequent, and whenever he has one he is impelled—he finds it necessary—to get up and go out of the house, so as to "work it off," and thereby avoid attacking people. The impulse is not to injure anyone in particular; nor is it always, as in the case of the boy and the cat, against something small, nor against any particular class of person or things. After this last "feeling" he felt strongly inclined to attack me. The impulsion is against anything or anyone that happens to be near him.

As I was talking to him he had another attack. His gaze became fixed and very intent, then more and more intent until he assumed an expression of actual ferocity. Next he drew in a slow, deep, shuddering breath; drew himself up and back; his eyes closed with a quivering motion as his face turned grey; then he flushed and began to cry as before, and he was himself again.

The case was clearly one of *petit mal*, in which the post-epileptic automatism of action, which is so customary, is replaced by the automatic occurrence of a desire. I have never come across a similar case, and the lessons that it teaches are many. Post-epileptic automatism is elaborate action, a caricature of normal action, and during the action there is, as far as subsequent recollection is concerned, total unconsciousness. In this case the post-epileptic occurrence is not action, but the experience of a desire which might prompt to action; but if it did, the action would be not an unintelligent caricature of normal action, but action fully directed by intelligence, and fully calculated to secure the satisfaction of the desire. In short, the desire, not the action, would be abnormal. Rare as it is, there is nothing in the replacement of post-epileptic automatic action by a desire that is inconsistent with the currently accepted mechanism of post-epileptic automatism. This is due to the uncon-

trolled over-action of lower nervous arrangements permitted by the exhaustion of higher arrangements that should, and normally do, control and inhibit the lower. Normally, our predatory and feral desires are controlled and inhibited by social desires of later origin, and therefore of higher rank. If we assume that these social desires are embodied in nervous arrangements capable, like other nervous arrangements, of being exhausted and rendered incompetent by the excessive discharge of epilepsy, there is nothing inconsistent in supposing that, by this exhaustion, arrangements of lower rank, embodying cruder desires of earlier origin, may be set free to overact, with accompanying excessive manifestation of such crude desire. The interesting feature of this case is that it goes far to establish what has never heretofore been anything but an unsupported speculation, that specific desires may be regarded as accompanying the action of specific regions of nerve tissue.

Another very important feature in the case is the light it throws on *epilepsie larvee*. Certain crimes of brutal and ferocious violence are committed by epileptics, not after a fit, but at a time when a fit is due to occur, and seemingly in place of a fit. If we suppose that in such cases a fit does occur, but is of very minor severity, and affects merely the highest arrangements of a particular region, allowing excessive activity of the underlying region; then, if the underlying region so overacting is the region affected, but affected less severely, in this very case, it goes far to explain the occurrence of these crimes, and to justify the hypothesis of *epilepsie larvee*.

THE RELATION OF MENTAL ATTITUDE TO BODILY FUNCTION.—W. L. Conklin believes that imagination produces not only functional disturbance but even organic changes if these disturbances are long continued. The same effects may follow long-continued exercise of the intellect, the emotions, and the will. Thought, either conscious or unconscious, precedes and gives direction and character to bodily function. As physicians we give too little attention to psychotherapy. By this term the author does not refer to hypnotic suggestion, which in his opinion has a

very limited field of usefulness as a therapeutic resource, but to the practical application of the plain, common-sense fact that right thinking, a normal, healthful mental state or attitude, is conducive to continued bodily health and a potent remedial agent when bodily health is below the normal standard. He wishes to place emphasis on the fact that just as *bodily* attitude does not mean the position of the head or an arm, but of the body as a whole, so *mental* attitude refers, not to the will or the emotions, but to the mind in its entirety. What is the trend of a man's thought? Can he use his intellect and as a rule reach conclusions which are definite and reasonable? Are his emotions and imagination under control and is his volition strong? Has he an object in life and some sense of personal responsibility or is he aimlessly drifting? These are questions which have a distinct bearing upon the bodily function and health of any individual. An intelligent recognition and application of the principles involved in the relationship of mind and body is of great value in the scientific treatment of disease. It is not so easy as to prescribe veronal and valerian, but more lasting results may be looked for. Moreover, the patient who has been taught something regarding the importance of mental attitude in its relationship to health will be less in danger of a repetition of his present painful experience, and preventive measures must always be regarded, both from a scientific and from a philanthropic standpoint, a long step in advance of those which are palliative or curative only.

THE BLOOD CONSERVATION OF NEUROTIC INDIVIDUALS.—J. G. Drennan notes the occurrence of an extreme degree of pallor in certain persons who are exceptionally active, and who are said, in common phrase, to "live on their nerve." But the blood of these same neurotics is not the blood of an anemic person, however much in other respects they resemble one another; but the pallor of the one is not the pallor of the other; that of the neurotic is due to the absence of blood in the capillaries of the skin, and not, as in the anemic, due to presence in them of a blood poor in corpuscles. This blood circulates in the superficial capillaries of his skin and

gives him the typical, pasty, sometimes rosy, puffy appearances of the anemic; while, on the other hand, the neurotic has empty capillaries in his skin. It has been scientifically demonstrated that if his skin is pricked with a needle no blood issues from the puncture, showing that there is an absence of blood in the capillaries of the skin, while in the case of the anemic a thin, watery, reddish fluid issues, denoting the presence of a poor quality of blood,. The neurotic is a shrewd individual; whether consciously or unconsciously, so one cannot perhaps say, though experience shows that in many respects he is consciously so; though probably in this one respect it is unconsciously that he regulates his blood supply for his own best interests. Nature wisely attempts to make a good use of the small amount of blood which such a person manufactures, normal in quality, but subnormal in quantity, and, therefore, not sufficient for all the requirements of the body. To thus economize, she restricts the flow to the skin, allowing merely sufficient to maintain the skin in a condition of living, not of health, however, for the skin is tough and leathery, due to poor vascular supply; but it furnishes a covering for the body, even if its other functions are not performed. The bulk of the small blood supply of the body in these cases is sent to the most vital structures, and they are maintained in a fair degree of health, and to all appearances the person performs the ordinary, and sometimes extraordinary, duties of life as well as his more robust-looking brother. Very often considerable of this scant supply goes to the brain and spinal cord, and a well-nourished nervous system, even if it be in a neurotic person, regulates the other systems. His efforts may be spasmodic, but generally they are fit for the occasion. Never despair of one of these pallid workers flunking his duty, when necessity or ambition make demands upon him. The proverbial pallor of the hard student is accounted for in this same way; the bulk of his blood supply going to nourish his brain. There is, on the other hand, the rosy neurotic, less often seen, who is also anemic, and to whose skin considerable blood is supplied; there is not in this case the conservatism of the other, nor is the

blood of such good quality. The skin in the pallid case is rather a foreign covering, and not the true covering of a human body.

THE IMPORTANCE OF OPHTHALMOSCOPY.—E. Jackson emphasizes the importance of the use of the ophthalmoscope in the study and diagnosis of disease, outside of the specialty of ophthalmology. He points out the specially favorable opportunities afforded by the eye for pathological observation, giving, as it does, the means of direct inspection of the most delicate mucous membrane in the conjunctiva, of the effects and repair of injury in the cornea, of lymph spaces and channels, and of unstriated muscle in the anterior chamber, and iris, and of the nutritional and other changes of a modified epithelial tissue in the lens. It is through the ophthalmoscope, however, that ophthalmology is able to bring its greatest contributions to general medicine. The revelations of the Roentgen ray, he says, compared to those of the ophthalmoscope, are as the groping among twilight shadows to clear vision in strong sunlight. Not only do we see things with the ophthalmoscope, but we see them clearly, and we see them with the magnification of a good working microscope, and we see them alive. Passing with simple mention the vast number of conditions of cerebral, and general, and local disease, in regard to which the ophthalmoscope gives important information, Jackson takes up, to illustrate his points, the changes in the vessel walls and the retinal circulation that are so readily studied by the ophthalmoscope, and says their importance is not sufficiently appreciated by the profession at large. We are also able to study with the ophthalmoscope the results of lesions of related organs through the nervous and vascular connections of the retina and by the disturbances of the field of vision. The lesions of the eye have peculiar importance with reference to general pathology and general diagnosis, and the time will come when the observation of the ocular circulation is deemed as important as that of the pulse in the diagnosis of disease.

VASOMOTOR PARESIS IN PNEUMONIA.—Collapse of the

capillary blood-vessels due to a paretic condition of their walls, or a condition of stasis, in which the walls remain distended and flattened out, is the real cause of death in pneumonia. The vessels have lost their resistance and that elasticity which propels the blood through them and that loss of elasticity is the result of toxemic poisoning the nerve centers in the medulla. Those centers are paralyzed and consequently the coats of the arteries and veins are also paralyzed rendering them useless and forming a permanent obstruction to the flow of blood back to the heart. In the last stages of pneumonia, when the temperature is down, when the lungs are clogged with hypostatic congestion, when the dyspnea is excessive, respiration shallow and frequent and the heart is laboring to compensate for the loss of elasticity in the peripheral vessels, which is so essential to normal conditions, if they can be freed so as to allow the patient to breathe freely, the whole aspect of the case will change for the better and the patient will recover. Therefore the chief indication is to remove that obstruction and do it quickly, or the patient will die suddenly. For combating the collapse in these instances, the author recommends a bath of 100 deg. F. to extend just above the patient's hips and several basins of water at 60 deg. F., or lower, poured from a height on shoulders and back (cold wet towels slapped then a few times will do as well.) The author maintains that reaction will prevent untoward effects of cold. This is good treatment for pulmonary or other splanchnic cavity blood stasis.

CLINICAL PSYCHIATRY.

THE PSYCHOSES OF INFLUENZA form the subject of a paper by Dods Brown in the *Scottish Medical and Surgical Journal*. Although influenza is the cause of no special form of psychosis, it appears to be the most important febrile disease in the causation of mental disorder. It is now recognized that cases of pre-existing mental disease are increased in severity by the supervention of influenza. Dr. Dods Brown maintains that post-influenzal exhaustion, although an important factor, is not the only factor in the prejudicial effect of

influenza upon the brain. The influenza bacillus or toxin seems to be the exciting agent. But Pfeiffer's bacillus has not yet been found in the cerebro-spinal fluid of patients exhibiting ordinary post-influenzal psychoses, although it has been found in cases complicated by meningitis. Melancholia with pronounced suicidal tendency is the commonest form of insanity which is associated with influenza: but almost any kind of psychosis may be seen. The maniacal type of mental disorder is commonest in women and young children, and comes on earlier than the melancholic variety. In 60 per cent. of cases of post-influenzal insanity Dr. Dods Brown obtained a definite history of predisposition, either by heredity or by a previous attack. He recommends that patients suffering from influenza should be isolated and cared for as infectious cases, as far as possible. It is of importance that they should be thoroughly treated, especially when they are known to have an unstable nervous system. During convalescence much can be done to avert a mental breakdown by change of air and stimulating treatment.—*The Hospital*.

HALLUCINATIONS. The new journal, *The Hospital*, shows its appreciation of a knowledge of alienism in practical medicine by a page like the following in its May 16th number. An hallucination is usually described as a perception which has no objective cause, and is to be distinguished from an illusion, which is a false perception of a real object. In an hallucination the stimulus does not arise outside the body, but either in the end organ, or in the cerebral centre, or in the nervous tract between the two: it is thus a morbid process. In an illusion a sense organ is stimulated in the ordinary way by an object outside the body, and the stimulus is carried to the cerebral centre; but the intellect wrongly interprets the sensation. Both, it must be noticed, arise from the stimulation of a special sense. As an example, if a person looking into an empty street actually sees a black object go past when there is no object there, that is a visual hallucination; but if a piece of black cloth blows past, and the person believes that what he sees is a black dog, that is an illusion of sight. Amongst sane

people hallucinations (except of the simplest kind) are comparatively uncommon, whilst the frequency of illusions is testified by the proverb, "All is not gold that glitters." It may be noted here that a delusion is a false belief—a purely intellectual process, and one not dependent on a special sense.

Hallucinations are met with of every special sense—of sight, hearing, taste, smell and common sensation; they are also described of muscular sense. They vary from vague and ill-defined to most vivid perceptions; but the essential feature of them all is their absolute reality or objectivity to the person who has them. The commonest ones are those of hearing, and the most uncommon those of smell. They are sometimes found to be unilateral, or to differ on the two sides; thus visual hallucinations may only occur in one eye, or auditory ones may differ in the right and left ears. Sometimes the auditory or visual hallucinations cease on closing the ears or eyes, but this is not always the case.

Hallucinations alone are not a sign of insanity; the simplest ones—*e. g.* flashes of light, ringings, buzzings, etc.—occur to most people at times, and more systematized ones to some who are perfectly sane. But though they do not alone indicate insanity, they very frequently accompany or cause it, and are of great importance as they so often give rise to delusions. In the early stages they are almost always indefinite, and become systematized with time.

Taking an auditory hallucination, as being the commonest, for an example, its life history would be probably as follows. The patient first experiences noises, which increase in frequency and intensity and for which he can assign no cause. With this increase of frequency and intensity the attention is more and more compelled to them; and the patient, not realizing or being unable to believe their true meaning, owing to their absolute objectivity, begins to think out a cause for them. The imagination soon comes into full and unrestrained play, and the patient says he hears voices talking to him; the noises, with the help of the imagination, being transformed into words. At this

stage he will not at first be able to tell exactly what the voices say nor who is talking, but a little later will say what they talk about, though unable to quote the exact words. Later still he will say who is speaking, and what are the exact words said, the delusion that some definite person is speaking to him having thus appeared. If the patient is able to quote the exact words he hears it can be taken for granted that the hallucinations have existed for some time. The process above described may stop short at any point with the cessation of the hallucinations; but if these do not cease it is easy to understand how delusions arise. Should the patient realize and believe that his sensations are due to subjective causes, he will not become deluded; but this appears to happen seldom, owing to the intense objectivity of the hallucinations.

It is possible that hallucinations and the accompanying delusions may be of a harmless kind; but, unfortunately, experience teaches that the opposite is generally the case. The voices usually insult or otherwise goad to fury, at times causing the patient to strike someone, or otherwise to behave irrationally. Again, the voice may command the patient to do certain things, even commit suicide or murder, and if the voice is insistent, or is believed to be that of someone who must be obeyed—*e. g.*, the Almighty—the results may be disastrous. The tendency in hallucinated cases is always towards irresponsibility.

The following are examples of hallucinations giving rise to delusions in insane patients at present under care. A widow, whose mental attack commenced some years ago, after the death of her husband, suffers from vivid auditory hallucinations, which occur every night, and sometimes in the day. At times she has simultaneous hallucinations of every special sense—hears voices, sees visions, has evil smelling and tasting gases and powders pumped into her room, and is played on by electricity, whilst being alternately baked and frozen. Another lady believes she is verminous; she can feel lice crawling over her. She is scrupulously clean, but no amount of cleansing will remove the delusion produced by her hallucination of common sensation. A third

case is persecuted by boys in the street at night. They throw filth into her room and fill her mouth with fæces. How this is done she cannot explain, but she knows that it happens, as she tastes and smells it. Yet another lady, a puerperal case, had a visual hallucination of the head and shoulders of a very beautiful woman. This hallucination seems to have appeared quite suddenly. It did not trouble her until one day it spoke, told her to do something, and she promptly obeyed; the result was terrible. For a long time she retained the visual hallucination, but has had no recurrence of the auditory one. She could describe the vision, and see it as she spoke to one. She knew that other people could not see it, though it was intensely real to her; but nothing can persuade her that the voice she heard was not real, or that it did not actually come from the beautiful vision.

NERVOUSNESS: ITS SIGNIFICANCE AND TREATMENT.—During four years, viz., from 1900 to 1904, diseases of the nervous system were responsible for more deaths than any other class of ailments. A bulletin on health statistics has just been issued by the United States Census Bureau, which claims that no less than 302,876 persons died from some nervous disorder during this period. This large number of deaths is even greater than those who died from more common fatal tendencies of tuberculosis, typhoid fever, malaria, infectious fever, alcoholism, cancer, pneumonia, and even the epidemics of yellow fever. Hence nervous diseases take precedence of all other classes of diseases as a death producer or destroying agent.

That nervous and mental diseases are increasingly prevalent and widespread in America is very clear.

The writer also makes a plea for state hospitals for psychasthenics who are not legally insane.

NEURO-SURGERY.

SURGERY OF THE GASSERIAN GANGLION.—Dr. Stephen H. Weeks, American Surgical Association, of Portland, reported two cases of removal of the Gasserian ganglion for the re-

lief of *tic douloureux*. He disapproved of the operation as a primary procedure for the condition, claiming that the extra-cranial operations upon the branches of the fifth cranial nerve should first be made. There was complete relief from pain in both cases. The escape of a small portion of the brain during one operation had apparently caused subsequent difficulty in the pronunciation of certain names.

NEUROTHERAPY.

THE PRESENT STATUS OF SPINAL ANALGESIA.—By Dr. Strauss (*Dtsch. Zeitschrift. f. Chir.*, Vol. 89, H. 1-4, 1907.

Based upon a critical review of the scattered material, the author arrives at the following conclusions:

At the present time, tropacocain must be regarded as the most harmless remedy for the production of spinal analgesia. Even this, however, is not free from by-manifestations, and cannot be considered as absolutely harmless. Donitz reports the case of a man 75 years of age, who died after the injection of 0.13 tropacocain. The normal dose is 0.06; the dosage should be rather less than more. Higher analgesias may be obtained by elevation of the pelvis, and aspiration of considerable amounts of spinal fluid. The addition of adrenalin should be omitted, since it increases the danger. The most rigorous observation of the technique is absolutely essential. The average duration of the anesthesia is one hour. The lower extremities, the perineum, and the lower abdominal region can be anesthetized with a certain degree of positiveness.

The procedure is indicated in old, decrepit individuals; in cases of non-tuberculous lung disease; in diabetic patients. The contra-indications are youthful age of the patient, up to 15 years; affections of the brain and spinal cord; neuropathic or psychopathic conditions. The possibility of getting along with local anesthesia likewise excludes the use of spinal analgesia. Especial care is indicated in all tuberculous processes and kidney diseases, also in syphilis and advanced arteriosclerosis. The method as such is not devoid of danger, and its employment should always be surrounded with

certain limitations. While the untoward by-phenomena or sequelæ may be considerably diminished by proper technique and selection of the cases, it is impossible to avoid them entirely. In conclusion it may be stated that in suitable cases spinal analgesia, although never absolutely free from danger, offers numerous advantages when properly performed.

It is not as generally known as it should be that the originator of the method of spinal analgesia, for which credit is often erroneously given to Bier, is a contemporaneous American physician, Dr. Leonard Corning, of New York. —*Excerpted by Collins and Robbins in Post-Graduate.*

OEHLER. "Experiences with 1,000 Cases of Spinal Anæsthesia." *Beit. z. Kl. Ch.*, Bd. 55, 1907.

Oehler first emphasizes the fact that it is Bier we have to thank for this discovery. He states that their injections are made between the third and fourth, or second and third lumbar spines, and they endeavor to replace an amount equal to the fluid that escapes. He states that occasionally, owing to change in form of bones, or to excessive fat, one is unable to enter the spinal canal. He states that the anæsthesia usually comes on three to five minutes after the injection. The upper limit of the anæsthetized area varies, and he thinks by raising the pelvis one can increase the height. He states that nausea and vomiting are occasionally seen, due partly to the injection and partly to the operation. He has used the method on patients as young as seven and as old as eighty years. He has used stovain, novokain, and alypin, and tropococain. Of all these he prefers the last. He uses 1 to 1½ cm. of 5 per cent. freshly made and sterilized solution to which has been added one drop of the ordinary adrenalin solution to the cc. The persistence of the anæsthesia varies from one-half to five hours, but on an average about three-quarters of an hour. Pain, nausea and vomiting are the late bad results. One is never sure of anæsthetizing the parietal peritoneum. Septic processes are a distinct contra-indication.

KUSTER. "Spinal Anæsthesia." *Tr. S. A. Ass.*, V. 25, 1907.

Kuster first refers to the fact that cocain can not be used, as with sterilization it usually becomes decomposed. Stovain had a fatal action in a case reported by Fritz Konig. Kuster states that the only suitable drug is novocain, which is mixed with a minute quantity of suprarenin. He states he has used it for operations as high as the umbilicus. He injects the solution, when possible, with the patient sitting up and bent forward. He endorses the fact pointed out by Ryall of London, that if 15 cc. of spinal fluid are first withdrawn the patient will probably escape the usually severe headache. He uses 2 cc. for the low operations and 3 cc. for the high. The head obstruction, as demonstrated by Donitz, can increase slightly the upper level of the anæsthesia. Five to ten minutes usually is sufficient for the anæsthesia to be complete. Headache follows in about 14 per cent. of cases, but this is relieved by withdrawing 10 cc. of spinal fluid. He combats the statement of the Breslau clinic that pneumonia is as frequent after spinal as after general anæsthesia. He refers to the statement that spinal anæsthesia might cause late degeneration of the spinal cord.—*Excerpt by C. B. K., Montreal Med. Jour.*

CHRONIC ALCOHOLISM.—G. E. Pettey classifies habitues of alcohol as regular drinkers and periodical drinkers, with subdivisions. Treatment should begin with the elimination of all waste products which the effects of alcohol have caused the system to retain. Bowels, kidneys, and skin should all be called on. Then the various electric treatments, vapor showers and other baths, suggestive physical training, discipline, etc., for patients of the more promising class. Another class will need special treatment for troublesome stomach catarrh. Treatment must be kept up until the patient is able to enjoy and assimilate three good meals daily. Most of these chronic cases can be best cared for in an institution where better disciplinary environment can be maintained. The author admits the wide range of temperament found in this class of patients but believes that as

large a percentage of permanent cures is possible as with any other serious ailment. The physical man must be renovated and every bodily function restored to normal activity while the mental bias favorable to the use of alcoholic liquors must be eradicated.—*N. Y. Med. Jour.*

EXTERMINATION OF MOSQUITOES BY CACTUS PASTE.—Consul William Henry Bishop, of Palermo, Italy, transmits the following information relative to experiments made by the chief of the sanitary service at Gaboon, French Africa, with the cactus as a substitute for petroleum for the extermination of mosquitoes in warm climates:

The thick, pulpy leaves of the cactus, cut up in pieces, are thrown into water and macerated until a sticky paste is formed. This paste is spread upon the surface of stagnant water, and forms an isolating layer which prevents the larvæ of the mosquitoes from coming to the top to breathe and destroys them through asphyxiation. It is true that petroleum can do the same service, but in warm climates petroleum evaporates too quickly and is thus of little avail. The mucilaginous cactus paste, on the contrary, can hold its place indefinitely, lasting weeks, months, or even an entire year; and the period of development of the larvæ being but about a fortnight, it has the most thorough effect.—*Scientific American.*

NEUROPATHOLOGY.

PATHOLOGY IN CEREBRO-SPINAL FLUID.—From the *New York State Journal* we abstract that J. Graham Forbes has examined the cerebro-spinal fluid obtained by the operation of lumbar puncture from 140 children. The records include 57 cases of tuberculous meningitis, 36 cases of meningococcus meningitis, 16 cases in which other organisms were found in the fluid (pneumococcus, streptococcus, staphylococcus, and *B. coli communis*), 3 cases of syphilitic meningitis, 14 cases in which cerebral conditions other than meningitis were present (abscess, tumor, sclerosis, and hydrocephalus), and 14 cases with meningeal symptoms due to whooping cough, bronchopneumonia, and acute gastro-

enteritis. In the tuberculosis cases lymphocytes formed the bulk of the deposit thrown down by the centrifuge. A slight trace of albumin was present in all cases.

In meningococcal meningitis the fluid, in severe fatal cases and in the acute stage of those which eventually recover, is turbid, contains a heavy trace of albumin, and a large number of polymorphonuclear cells, with meningococci identified in film preparations and culture. In the less acute cases the fluid is frequently clear and contains a faint trace of albumin; the cell deposit is scanty but still composed chiefly of polymorphonuclear cells with a few meningococci in film preparations but not usually obtained in cultures. In the chronic cases, which recover or result in hydrocephalus, the fluid is clear—no albumin, or the merest trace is present—and the only cells found are a few lymphocytes which are often degenerated; film preparations show no organisms or only a very few degenerated diplococci; and cultures are sterile.

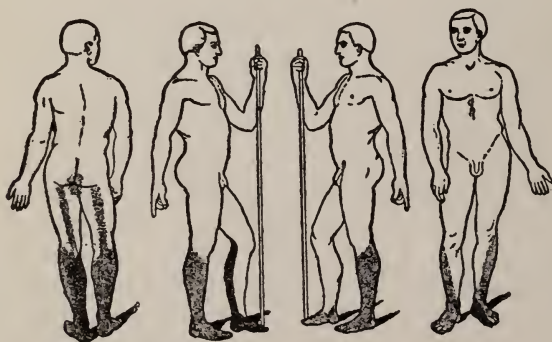
This author was able to negative 14 cases presenting meningeal symptoms by examination of the cerebrospinal fluid. The information derived from examination of the cerebrospinal fluid shows that in the majority of cases, both from the positive and negative aspects, the operation of lumbar puncture provides a means of diagnosis of much importance.

INSTANTANEOUS RIGOR MORTIS.—"Cases of instantaneous rigor mortis are more frequent in military experience than in the ordinary practice of peace." An interesting case of this kind occurred at the time of the famous charge of the Light Brigade, at the battle of Balaclava, celebrated in poetic song by Tennyson, where "some one had blundered." "The bearer of the repeated orders to make the foolhardy attack which resulted in the near annihilation of the light brigade, was a staff officer named Captain Nolan. Lord Lucan, to whom the order was delivered, seeing the fruitlessness of the effort could scarce believe the order. Some words ensued which might be considered as a rebuke, an indignant rebuke, inflicted by a Captain upon a Lieutenant General in front of

his troops. The staff officer had been very busy bringing orders and under a very great strain bodily and mentally. Immediately after the start of the light brigade on its fatal charge Lord Cardigan was leading the charge and riding in front of his troops. He had ridden scarce a hundred paces when he noticed Nolan audaciously dashing diagonally across his front from left to right. Not satisfied with this great breach of etiquette, Nolan turning round in his saddle was shouting and waving his sword as though he would address the brigade. Afterthought showed that when Nolan was strangely deporting himself in advance of the troops he was riding in a direction which might well have given significance to his shouts and his gestures. He was riding in a direction which would have led the light brigade to the causeway heights where the Odessa regiment was placed and where victory probably awaited them, not to the north valley where they were to be raked with flanking fires on both sides. The first shell from the Russian batteries thrown on account of this advance burst on the right front of Lord Cardigan, so bravely though against his judgment, leading his troops to a glorious disaster. It threw a fragment which hit Nolan full in the chest and tore a way into his heart. Imagine the condition of Nolan at the time that shell hit him. He had just seen that the order had been misunderstood, that the brigade was going to take the wrong direction and going to be destroyed. Such was the nervous tension and muscular exhaustion of Nolan when a fragment of a shell tore a hole into his heart. The inanimate sword dropped from his hand but the arm with which he was waving it the moment before still remained high uplifted in the air, and the grip of the practiced horseman remaining as yet unrelaxed, still held him firm in his saddle. Missing the perfect hand of his master, and finding the accustomed governance now succeeded by dangling reins, the horse all at once wheeled about and began to gallop back upon the front of the advancing brigade. Then from what had been Nolan, and his form still erect in the saddle, his sword arm still high in the air—there burst forth a cry so strange and appalling that the hearer who rode nearest to him has always

called it "unearthly." In truth I imagine the sound resulted from no human will, but rather from the spasmodic forces which may act upon the bodily frame when life as a power has ceased. The firm seated rider with arm uplifted and stiff could hardly be ranked with the living. The shriek men heard rend the air was scarce other than the shriek of a corpse. The dead horseman rode on till he had passed through the interval of the 13th Light Dragoons. Then at last he dropped out of the saddle. This is one of the most striking instances of instantaneous rigor mortis on record and bears out the belief that great excitement and muscular fatigue aid its advent.—*E. S. McKee, in Military Surgeon.*

AREA OF LOST TACTILE SENSATION IN CAUDA EQUINA TUMOR.—Dr. R. C. Elsworth, Surgeon of Swansea General Hospital, reports in the *Edinburgh Medical Journal* for March, 1908, the following record of tactile sensation abolish from cauda equina tumor pressure with returned sensation after removal of the adrenal tumor pressure by operation.



The reflexes below the pelvis, both superficial and deep were absent save for a very feeble plantar reflex on the right side.

Pain sensation was much diminished on the outer side of both legs and both feet and on both soles, especially the left, and up the back of both thighs.

Tactile sensation was impaired over the lightly shaded areas and absent over the deeply shaded areas. These, it will be observed, respond with the distribution of the fifth lumbar and first, second and third sacral nerves. On the left side tactile sensation was completely abolished over the distribution of the first sacral nerves. In the regions not enumerated tactile sensation was not altered.

There was no evidence of nutritive changes in the skin, bone or joints. There was no deformity of the spine and no external evidence of sacro-iliac disease.

Percussion of the spine revealed a tender point at the level of the fifth lumbar spine, which was so sensitive that the slightest flick caused intense pain at the spot, which radiated down the legs.

The appetite was good and there was no evidence of disease of other organs save for some slight prolongation of expiration in the right subclavicular region. The urinary functions were unaltered.

The following report on the tumor was received from the Clinical Research Association:

"The source of this specimen is not mentioned. Its structure resembles that of a fibro-sarcoma such as would arise in connection with the sheaths of a nerve. The tissue is traversed by many vessels and by groups of dilated capillaries. Some of them have ruptured and caused extravasation of blood. Though the degree of malignancy is low, such growths are liable to recur locally."

Since the operation the patient has made slow but steady progress. He has now normal sensation in the left leg and foot, all the old pain in the back and legs has disappeared and he is able to walk half a mile without fatigue. His weight at the time of the operation was four stone seven pounds and on January tenth last it was four stone and thirteen pounds, which for his height, 5 feet 4 inches, is still lamentably small.

NEUROPHYSIOLOGY.

TASTE AND APPETITE.—By Dr. Sternberg (*Zeitschrift. f. phys. und diätet. Therap.*, II, 1907-8).

The expression of appetite in the ordinary sense of the term, is not dependent upon a local cause, but rather upon the state of the reaction apparatus as a whole. Appetite has practically nothing in common with the stomach, being influenced by all the organs and all the functions of the organism; hence, the waywardness and capriciousness which so frequently characterize it. The secretion of the gastric juice has recently been considered in connection with appetite; but as this secretive is determined by a variety of stimuli, including quinin, it can hardly constitute the essential feature of appetite. The various "appetizing" foods present a different behavior. Coffee satisfies the appetite, whereas alcohol stimulates the desire for food; sweets promptly give rise to a sensation of satiety; bitter substances rouse an appetite for other tastes.

The Latin word *appetere*, from which appetite is derived, was not originally applied to articles of food, but had the general meaning: to wish, to desire. In a similar way, what is now known as appetite, represents a state or condition of the entire nervous system towards those articles which are desired for incorporation into the digestive apparatus. This willingness, however, is not solely dependent upon the food value of the desired substances, as expressed in calories, but to a far greater extent upon the associated esthetic stimuli conveyed by them.

The character of appetite may likewise be studied by way of its opposite: distaste and nausea. These are psychic depressant sensations referable to muscles, more particularly those which usher in vomiting. Anorexia, nausea, and vomiting represent the climax of these depressant sensations. Evidently, the muscular components of the digestive tract are the first to be involved, beginning with the muscles of the mouth. Meanwhile, it is an interesting fact that the reaction of the muscular apparatus may take place in either of two directions, depending upon the state of receptiveness (positive or negative). The quantitative intake is regulated by hunger and thirst, while a good appetite attends to the normal course of digestion, and presum-

ably, to a certain extent, to the proper mixing of the various foods.—*Excerpted by Collins and Robbins, Post-Graduate.*

PSYCHOTHERAPY.

CURE OF MUCOMEMBRANOUS ENTERITIS BY A FRIGHT.—The *Gazette Medicale de Nantes* contains in a recent number a communication from Vince relating that he had been treating for two or three months a patient with mucomembranous enteritis without appreciable benefit. The patient was a nervous, arthritic woman of 30, but vigorous and fond of outdoor sports. During the course of the enteritis she lost several pounds and was frequently so weak that she could not leave her bed. A fire broke out in her room one night, causing great alarm, and two days later all symptoms of the intestinal trouble had vanished and they have not returned during the six months since, although the patient abandoned all therapeutic and dietetic measures.—*Jour. A. M. A.*

REVIEWS, BOOK NOTICES, REPRINTS, ETC.

A PRIMER OF PSYCHOLOGY AND MENTAL DISEASE.—For use in Training Schools for Attendants and Nurses and in Medical Classes, and as a Ready Reference for the Practitioner. By C. B. Burr, M. D., Medical Director of Oak Grove Hospital (Flint, Mich.) for Mental and Nervous Diseases; Formerly Medical Superintendent of the Eastern Michigan Asylum; Member of the American Medico-Psychological Association; of the American Medical Association; Foreign Associate Member Societie Medico-Psychologique of Paris, etc. *Third Edition*. Thoroughly Revised, with Illustrations. Pages viii-183, 12mo. Bound in Extra Vellum Cloth, \$1.25 net. F. A. Davis Company, Publishers, 1914-16 Cherry Street, Philadelphia.

We have no further commendations to make of this little book, other than have been already expressed.

The advantage of this valuable brochure to the student is its brevity combined with accuracy of clinical observation. It does not paralyze the student, for whom it is intended, with a vast puzzling array of erudition as do some of the larger books and can be readily gone over by him with profit.

This book is not so exhaustive or explicit as it might have been made if more space had been given, but it is extensive enough for the student and nurse as a primer or first book of normal and morbid psychology.

The author speaks from the right standpoint, viz: clinical knowledge of the insane. This little book is not a dissertation drawn from pure psychic ratiocination but from personal observation of the insane, the right standpoint for writing of books touching on psychiatry.

BORDERLAND STUDIES, Volume II—by George M. Gould, M. D.
P. Blakiston's Son and Co., Philadelphia, 1908.

Gould's writings are always interesting, whether one agrees with or differs from him in observation or conclusion.

He asks the question "is it wise to have killed the family physician" with specialism? We answer, the family physician is not dead but only sleepeth. He is being aroused and will come into his own again with a better armamentarium and equipment than ever before and a better power of generalization of specialization. He will syndicate his practice and do many of the now neglected things he used to do and more.

True, Dr. Gould's cynical frame of mind, when in critical mood, suggests the portals of a demi-fous establishment sometimes and much of the chapter on vocation or avocation is so suggestive.

Dr. Gould places alcoholism, not without some reason, among the seven deadly sins of civilization, also syphilis, but why he should so class sugar sex, and eye-strain is a puzzle to the average man of understanding. The best and most level headed chapter in the book is the history of the house. But here he omits the dwellings of the Aztecs, Zunis and other cliff dwellers and the ancient Persian villages of the Turkish frontier.

CHEMICAL PROBLEMS IN HOSPITAL PRACTICE. By Otto Folin, Ph. D., Associate Professor of Biologic Chemistry, Harvard Medical School, and Chemist to the McLean Hospital, Waverly, Mass. Reprinted from *The Journal of the American Medical Association*.

This paper is replete with apt suggestion and wise criticism. The author thinks there is no reason why we should not be able to determine with all desired certainty to what extent it is possible to influence the tissue metabolism by drugs, by diets and by different modes of living. The very stability of the tissue metabolism (as indicated by the constancy of the kreatinin elimination) against nearly all fleeting changes of diets and conditions would seem to me to constitute the surest guarantee that this line of work will, at all events, not yield

a series of illusions. If well done, it should add a new chapter to the science of metabolism and of medicine.

PSYCHIC EPILEPSY: ITS ETIOLOGY AND TREATMENT. By R. W. Shufeldt, M. D., Major, Medical Dept. U. S. Army (ret.) Now of New York City, is a monograph which will especially interest the general practitioner. The author says:

"Among the best physicians to-day there are comparatively but few who recognize as a distinct malady that peculiar morbid condition of certain of the cerebral centers known as psychic epilepsy."

We should say the subject needs far more consideration than it has received at the hands of the general practitioner.

UBER SPATHEILUNG VON PSYCHOSEN.—Eine Monographische Studie von Alfred Petren, Stockholm.

We acknowledge from the author this timely and interesting study of late recoveries of the psychoses, exhibiting over two hundred pages of recovery records of chronic insanity found in the literature of German, French, English, Italian, Hollandish and Scandinavian psychiatry and find the presentation very interesting.

To one who has seen long standing and apparently hopeless cases recover, as the reviewer has, this book is timely and encouraging. It is a clinical argument against naming asylums for incurables. "All hope abandon ye who enter here" as over the gates of Dante's Inferno, is not good psychotherapy. It discourages psychiatric effort on the part of physician, patient and public.

After a pleasant daylight transfer of one hundred and twenty-five of the reviewer's patients from the Fulton, Missouri, Asylum to the, then new, St. Louis Asylum, the trip being made by carriage, river and rail, two patients, insane each over six years, recovered.

THE WASHINGTON HOME, CHICAGO.—A good institution doing a good work for the alcohol stricken and for humanity.

It is under efficient trustworthy official management, lay and medical.

THE HUNTINGTON NUMBER OF NEUROGRAPHS is a series of neurological studies, cases and notes by Editor William Browning, Ph. B., M. D. and Associates R. M. Elliott, M. D., E. G. Zabriskie, M. D., F. C. Eastman, A. B., M. D., F. Tilney, A. B., M. D. Vol. 1, No. 2. Issued May 25, 1908. Devoted to a well merited review department. Tribute to Dr. Geo. Huntington with an excellent photograph likeness of the Doctor as he appears now and another.

THERAPEUTIC NOTES, sent out by P. D. and Co., for July, 1908, have the additional attraction of the fine face of Dr. Wm. Holme Van Buren of N. Y., long since deceased but not forgotten. He was a colleague of Keyes and wrought well in his time for the good of the profession and the world.

HEADACHE CAUSED BY PATHOLOGIC CONDITIONS OF THE NOSE AND ITS ACCESSORY SINUSES. By Gerhard H. Cocks, M. D., Assistant Surgeon Manhattan Eye, Ear and Throat Hospital and John E. MacKenty, M. D., Assistant Surgeon Manhattan Eye, Ear and Throat Hospital.

THE PHYSIOLOGIC ACTION, ELIMINATION AND THERAPEUTIC APPLICATION OF SODIUM CACODYLATE, USED HYPODERMATICALLY. By Spencer L. Dawes, M. D., Adjunct Professor of Materia Medica, Albany Medical College and Holmes C. Jackson, Ph. D., Adjunct Professor of Physiologic Chemistry, Albany Medical College, Albany, N. Y.

TECHNICAL ASPECTS OF EXPERIMENTAL PSYCHOPATHOLOGY. By Frederic Lyman Wells, Ph. D., Assistant in Pathological Psychology, McLean Hospital, Waverly, Mass. Reprinted from American Journal of Insanity and "THE VARIABILITY OF INDIVIDUAL JUDGMENTS by the same author, reprinted from essays philosophical and psychological in honor of Wm. James, New York, 1908.

Two excellent contributions to experimental psychopathology and psychology of interest to all readers of the *Alienist and Neurologist*.

SCHLOSSER'S ALCOHOLIC INJECTIONS FOR FACIAL NEURALGIA. By Otto Kiliani, M. D., New York. Reprinted from the *Medical Record*, January 18, 1908.

showing him in 1872, when his description of this form of chorea—chronic hereditary adult chorea—was first given to the literature of clinical neurology.

This monograph contains a history of this interesting disease by Jelliffe, comments by the editor on others identified with its discovery, and a valuable bibliography, also comments by Tilney, contributions by Struempell, Diefendorf, Lannois and Paviot, Osler and the editor's instructive sketches of C. O. Waters, D. D. and M. D., Charles Rollin Gorman, M. D. and Irving Whitall Lyon, all connected with the evolution of the recognition of this neurosis as distinctive from ordinary chorea or the chorea sancti vitae of a past popular nomenclature.

Subscriptions and all business communications should be addressed to the publisher: A. T. Huntington, 1265 Bedford Avenue, Brooklyn, N. Y.

SMALL-POX—ITS PREVENTION, RESTRICTION AND SUPPRESSION—Published by the Illinois State Board of Health. Is a convincing, illustrated exhibit of the crime of neglect or refusal of vaccination.

The suffering, the risk, the danger of, and hideous disfigurement of non-vaccinated variola cases ought to warn and convince all of the supreme value and importance of applying Jenner's discovery to the relief of small-pox imperilled individuals and communities.

BULLETIN OF THE UNIVERSITY COLLEGE OF MEDICINE, RICHMOND, VA., July, 1908, contains: A Rapid Clinical Method of Determining the Ammonia Co-efficient in Urine.

E. Guy Hopkins. The Autopsy and Microscopic Technique for the Rapid Diagnosis of Rabies, as applied in the Laboratories of the Pasteur Department of The University College of Medicine. A. G. Hoen. Opsonins and Some of the Practical Results of Therapeutic Inoculation with Bacterial Vaccines. Karl S. Blackwell. The Double Iodides as Alkaloid Precipitants. Albert Bolenbaugh. Report of Operations, Department of Dentistry. W. H. O. McGehee.

AMERICAN PATH FINDERS OF THE NINETEENTH CENTURY is an interesting brochure of more than fifty Americans of

merit and fame in medicine, sent out free to physicians by the New York Pharmacal Assn., of Lactopeptine fame.

THIRD ANNUAL REPORT of the Henry Phipps Institute for the study, treatment and prevention of tuberculosis gives an interesting exhibit of the medical staff, and clinical work of the year by Lawrence F. Flick; Expectoration in Tuberculosis of the Lungs, C. M. Montgomery; Pulsating Pleural Effusions, W. B. Stanton; Albuminuria in Pulmonary Tuberculosis, C. M. Montgomery; Serum Treatment in Tuberculosis, Lawrence F. Flick; Laryngological Work of the Year, George Fetterolf; Neurological Work of the Year, D. J. McCarthy; Death in Pulmonary Tuberculosis, H. R. M. Landis; Autopsy Report of the Year, C. Y. White; Bacteriological Report of the Year, Mazyck P. Ravenel and J. W. Irwin; Bacteriological Findings in Comparison with the Pathological Diagnosis, J. W. Irwin; The Relation of Micro-organisms to Hemorrhage in Tuberculosis, Lawrence F. Flick; The Kidneys in Tuberculosis, Joseph Walsh; A Statistical Study of the Influence of the Henry Phipps Institute Upon the Death Rate from Tuberculosis in Philadelphia, Irvin E. Bennett and Lawrence F. Flick; Tuberculosis in Orphan Children, W. Taylor Cummins; The Training School for Nurses of the Henry Phipps Institute, Charles J. Hatfield.

TRANSACTIONS OF THE ACADEMY OF SCIENCE OF ST. LOUIS, volume twenty-seven, number one. A preliminary catalogue of the birds of Missouri, by Otto Widmann, is an interesting presentation of the subject creditable to the author, and instructive.

THE REPORT OF NEW YORK STATE COMMISSION IN LUNACY for 1906-7 is like its predecessors, a valuable statistical and otherwise instructive document especially upon a medical standpoint, should be in all libraries of scientific and sanitary reference.

THE SLOGAN OF THE "HOME CRAFTERS." is the shibboleth of sanitary life of mind and body; "every child in a garden, every mother in a home craft and individual in-

dustrial independence for every worker in a home of his own on the land." This presupposes the abolishment of that sober heart and hope and home of the American workman,—the beer canning habit and the thus alcoholically developed the neuropathic and psychopathic diathesis, in the many predisposed, who do not know their danger of brain destruction from this insidiously operating blood and nerve center poison. While corn in the ear was the shibboleth of safety to the Gileadites, the corn juice of the still is no balm in Gilead to the man who unwisely resorts to it as a beverage. An Iliad of woe is in its way which even Maxwell's Talisman can not avert from the brain and brawn and home and heart of labor. Science and Holy Writ enjoins one to "touch not, taste not, handle not," in lieu of blood replenishing water.

XV CONGRIS INTERNATIONAL DE MEDICINE, Libon, 19-28 April, 1906. Volume General.

A NEW METHOD OF DIAGNOSIS AND TREATMENT OF FISTULOUS TRACTS, TUBERCULOUS SINUSES AND ABSCESS CAVITIES. By Emil G. Beck, M. D., Chicago, Ill. From *Illinois Medical Journal*.

A good paper with twelve skyagraphs illustrative of text. The author requests and would appreciate reports of cases treated by Bismuth paste method for collective report to International Congress of Tuberculosis.

The Sphere of The Trained Nurse. By W. A. Newman Dorland, A. M., M. D.

Clinical Observations in the Treatment of Prostatitis. By Robert A. Black, M. D., Virginia Hot Springs, Va.

Epilepsy and its Treatment. By William Francis Drewry, M. D., Petersburg, Virginia. Reprint from *The Charlotte Medical Journal*, May, 1908.

The Eighty-Fourth Annual Report of the Officers of the Hartford Retreat at Hartford, Conn., April, 1908.

METASTATIC ADRENAL TUMORS IN THE LEFT MIDFRONTAL AND ASCENDING FRONTAL CONVOLUTIONS* was reported in the *American Journal of Insanity*, LIX, No. 3, by Doctors Walter Channing and Wallace M. Knowlton, Brookline, Mass., which should have attracted more attention than they did at the time. The subject is especially apropos at the present time since the appearance of Sajou's great work and the prominence he gives this and kindred subjects that we are prompted to call especial attention at this time to this interesting case.

The authors were able to find on record only one case of tumor of the brain of a similar origin. The case reported was that of Jores, of sarcoma of both supra-renal capsules with metastasis to the brain.

"Moore reported a case in which tumors of the supra renal capsules were said to be secondary to a sarcoma of the brain."

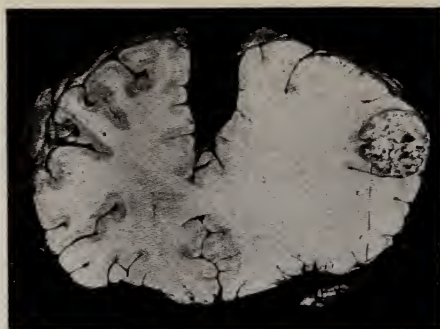
The authors note that "Virchow considers the medullary part of the suprarenal capsule as allied to nerve tissue."

"Vomiting and headache were absent, but during the last week or ten days of life the back of the neck was quite stiff and somewhat painful when the head was moved. Oppenheim regards rigidity of the back of the neck with cerebellar ataxia as characteristic of tumor of the frontal lobe." There was no apparent disturbance of vision, though there was choked disc. The stereognostic sense was not affected.

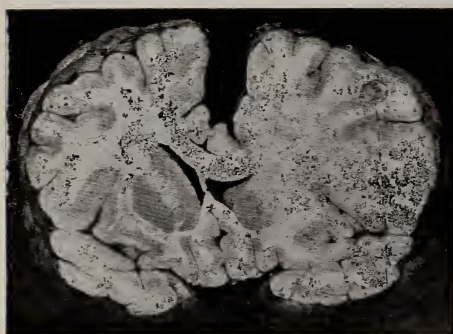
The special reason of the authors for reporting the case was the interest of the alienist in the brain tumors on account of the mental symptoms which nearly always accompany them, and sometimes obscure the physical signs causing errors in diagnosis.

Readers of the *Alienist and Neurologist* will find the entire article, with the full symptomatology, worthy of reading as good companion matter to Sajous' interesting volume.

*See illustrations.

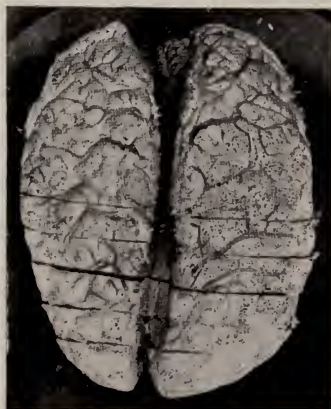


2 Transverse section through the posterior and inferior part of the mid-frontal lobe. Front view showing larger tumor



Transverse section through ascending frontal convolution Front view showing smaller tumor

**Amnesic Aphasia from Metastatic Adrenal Tumors
beyond Broca's Speech Center of the Brain.**
Channing and Knowlton



X¹ and X² indicate the location of the tumors

On the Variability of Individual Judgments. By Frederick Lyman Wells, Ph. D., Assistant in Pathological Psychology, McLean Hospital, Waverly, Mass.

Oxygen in Medicine and Surgery—a contribution with report of cases. By William Seaman Bainbridge, A. M., Sc. D., M. D., New York City.

IV Congres de l'Association des Médecins de Langue Francaise de l'Amerique du Nord.

The Treatment of Placenta Prævia. By H. S. Crossen, M. D., Clinical Professor of Gynecology, Washington University Hospital and Chief of the Gynecologic Clinic, St. Louis.

Experiments to Determine Co-conscious (Subconscious) Ideation. Reprinted from *The Journal of Abnormal Psychology*, Boston, U. S. A.

Third Annual Report of the Board of Managers of the Manhattan State Hospital to the State Commission in Lunacy for the Year ending September 30, 1907.

Reports of the Trustees and Superintendent of the Butler Hospital, Presented to the Corporation at its sixty-fourth annual meeting, January 22, 1908, Providence, R. I.

The Biennial Report of the Board of Managers of the Springfield State Hospital of the State of Maryland, Sykesville, Maryland, from October 1st, 1905, to October 1st, 1907, to his excellency, the Governor of Maryland.

The Law of Beauty in Human Anatomy, by B. S. Talmey, M. D., Gynecologist to the Yorkeville Hospital, former Pathologist to the Mothers' and Babies' Hospital, New York. Author of "Woman," A Treatise on the Normal and Pathological Emotion of Feminine Love.

Ortho-Roentgenography. By Dr. Franz M. Groedel, Bad-Nauheim.

Linksseitige Trommelschlegelfinger bei Aneurysma arcus aortae. Von Dr. Theo Groedel II in Bad-Nauheim.

Medico-Psychological Association of Great Britain and

Ireland. Abstract of Papers discussed at the Annual Meeting, 23rd July, 1908. *The Teaching of Psychiatry*. By Dr. Thomson.

Tenth Annual Report of the Managers of the New Jersey State Village for Epileptics, Skillman, Somerset County, New Jersey. For the Year Ending October 31st, 1907. Opened November 1st, 1898.

Announcement and program of subjects to be discussed and officers of organization of the III. Internationaler Kongress für Irrenpflege. Wien, 1908.

Dental Irritation as a Factor in Diseases of the Ear, Nose and Throat. By Robert Barclay, A. M., M. D., of St. Louis.

Thirty-second Annual Report of the Managers and Officers of the New Jersey State Hospital at Morris Plains. For the Year Ending October 31st, 1907.

Dr. William Baldwin Fletcher. The stockholders of this worthy institution pay a well-deserved tribute to the memory of its able and meritorious founder.

American Health, the Official Organ of the American Health League. Published by the Committee of One Hundred, New Haven and New York.

The Economic Advisability of Inaugurating a National Organization of Health. By J. Pease Norton, Ph.D., Assistant Professor in Political Economy, Yale University, and Secretary Section I, American Association for the Advancement of Science. New Haven, Conn.

Fourth Annual Message of John Weaver, Mayor of the City of Philadelphia, with the Annual Reports of the Director of the Department of Public Health and Charities and Superintendent of the Bureau of Charities for the Year Ending December 31, 1906. Issued by the City of Philadelphia 1907.

A Study of the Causes Underlying the Origin of Human Monsters. Third Contribution to the Study of the Pathol-

ogy of Human Embryos By Franklin P. Mall, Professor of Anatomy, Johns Hopkins University, Baltimore, Md.

State of New York, Annual Report of the Central Islip State Hospital at Central Islip to the State Commission in Lunacy. For the Year Ending September 30, 1907.

The Value of an Absolutely Vegetarian Diet in Psoriasis. By L. D. Bulkley, A. M., M D.

The Submucous Operation on the Nasal Septum. A Plea for More Rapid Technic. By L. E. MacKentry, M. D.

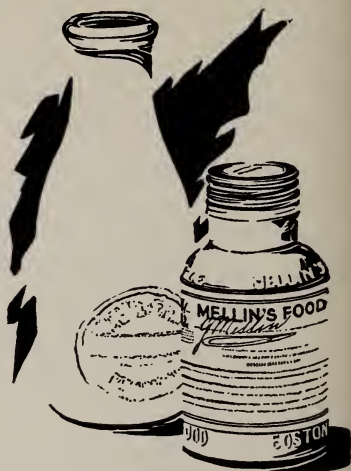
The Influence of Flesh-Eating on Endurance. By Irving Fisher, Ph. D., New Haven, Conn. From Yale Medical Journal.

The Hydriatic Method in the Treatment of Cardiac Disease. By J. H. Kellogg, M. D., Battle Creek (Mich.) Sanitarium. From Modern Medicine Publishing Co., Michigan.

The Influence of Alcohol on the Opsonic Power of the Blood. By Chas. E. Stewart, M. D., Battle Creek, Michigan

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PUBLISHER'S DEPARTMENT.

TABLET HONORS DISCOVERER OF ANAESTHESIA.—A tablet in honor of Dr. Horace Wells, discoverer of anaesthesia, was lately sent to his old home, Hartford, Conn., from Madrid by the Spanish Odontological Society, through the Spanish Minister at Washington.

The memorial is of silver plate surrounded by a wreath of white metal showing laurel leaves on one side and oak on the other, with laurel berries in white and acorns in gilt. Above the plate is an ancient lamp with its light burning, symbolic of the light which Dr. Wells has given to the world. The tablet is thirty-three inches by two feet, and bears the following inscription:—"The Spanish Odontological Society to Horace Wells, Madrid, January 14, 1907."

"SOME PHASES OF QUACKERY."—Should the extravagant, absurd language be used by a person in one's own town, which characterizes all quack medicine literature, it would be simply treated with derision. The quack avails himself of another element of human weakness, which is explained by a perfectly well-known psychological law—the law of suggestion.

It is the responsive quality in the human mind to this law of which in all ages empirics, scoundrels and sharpers have taken advantage, and which has contributed more than all other forces combined to the fearful sum of human misery.

The kidney is the most prolific field for the exploitation of the quack, for two reasons. The first is that it is a matter of common knowledge that no pathological condition is so serious as of that organ, and therefore it becomes an easy matter to excite alarm. The second is that all people have a backache at times, and from the influence of this kind of literature the impression has become almost universal that



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SECOND HAND BICYCLES. We do not regularly handle second hand bicycles, but usually have a number on hand taken in trade by our Chicago retail stores. These we clear out promptly at prices ranging from \$3 to \$8 or \$10. Descriptive bargain lists mailed free.

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SELF-HEALING TIRES **A SAMPLE PAIR**
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The regular retail price of these tires is \$8.50 per pair, but to introduce we will sell you a sample pair for \$4.80 (cash with order \$4.55).

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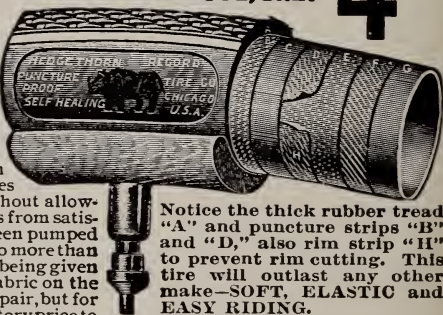
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a backache does proceed from some trouble with the kidney. As a matter of fact a backache is never an indication of kidney trouble.—*Dr. P. J. Noyes, Lancaster, N. H., Journal of Medical Science.*

A VALUABLE THERAPEUTIC AGENT, by C. P. Robbins, M. D., Louisville, Ky., Assistant to the Chair of Obstetrics and Gynæcology and Chief of Clinic, Hospital College of Medicine.—One of the principal subjective symptoms of any disease, or disturbance of nature, is pain, and what the patients most often apply to us for, is the relief of this annoying and troublesome feature. If we can arrest this promptly, they are much more liable to trust to us for the remedies which will effect a permanent cure. The everlasting resort to morphine is overcome in a great measure by the employment of reliable coal tar products. In cases of intermittent fever it is best to prescribe doses of one or two antikamnia tablets when the first chill comes on. I also find them most valuable in controlling headaches of a neuralgic origin. Rarely more than two tablets are necessary; the pain is promptly dissipated and the patient can go about as usual. The tablets of antikamnia and codeine, I consider the best and most useful in controlling severe pain. I have used them after surgical operations as a substitute for morphine, and find them eminently satisfactory. In controlling the severer forms of neuralgia they rank next to morphine itself.—*Medical Progress.*

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and invigorating those that have remained. Germiletum has proven in my hands the ideal solvent and alkaline antiseptic and will effectually cure the most advanced cases of chronic nasal catarrh.—*From A. W. Latimer, M. D., Formerly Physician of the St. Louis City Hospital.*

MELANCHOLIA.—In melancholia and in conditions of mental enfeeblement, Fellows' Syrup as a brain tonic is clearly suggested. The quinine and strychnine tend to flood the anæmic brain with food, while the hypophosphorus acid supplies a "conspicuous constituent" of those complex fats upon which proper nutrition of the nervous tissue depends.

PRESIDENT CASTRO has taken steps to fight the bubonic plague in Venezuela. He sent to jail the doctor who announced that the disease had broken out in the Castro dominion.

THE COST OF TUBERCULOSIS.—Dr. John B. Huber estimates that tuberculosis occasions to the United States an annual loss of at least \$330,000,000. By the side of this gigantic amount how small the figure being spent for its eradication. And yet tuberculosis is a preventable disease.

THE MEDICAL ERA'S GASTRO-INTESTINAL EDITIONS.—The *Medical Era*, St. Louis, Mo., will issue its annual series of Gastro-Intestinal editions during July and August. In these two issues will be published between 40 and 50 original papers of the largest practical worth, covering every phase of diseases of the gastro-intestinal canal. Sample copies will be supplied readers of this journal.

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Throughout the coming year, from its new location, it will continue to enlighten the Medical Profession on matters psychiatric and neurologic.

THE
ALIENIST AND NEUROLOGIST.

VOL. XXIX. ST. LOUIS, NOVEMBER, 1908. No. 4.

HYSTERIC STIGMATIZATION FROM RAIL-
ROAD ACCIDENT SUGGESTION.

A Study of Dutton vs. Chicago City Railway.

BY JAS. G. KIERNAN, M. D.,

CHICAGO.

Fellow Chicago Academy of Medicine, Foreign Associate Member French Medico-Psychological Association; Honorary Member Chicago Neurologic Society, Honorary President Section of Nervous and Mental Disease Pan-American Congress 1893, Chairman Section on Nervous and Mental Diseases American Medical Association 1893; Professor Neurology Chicago Post-Graduate School 1903; Professor of Nervous and Mental Diseases Milwaukee Medical College 1894-5; Professor of Nervous and Mental Diseases Illinois Medical College 1905; Professor of Forensic Psychiatry Kent-Chicago College of Law.

In the later discussions of hysteria by Janet and others, trophic phenomena from suggestion are rather ostentatiously ignored, possibly because of that undue deference to gross lesion cant or surgical bias which mars the attitude of "abnormal psychologists." Careful studies of such phenomena among the hysteric bourgeoisie of Belgium some decades back, show that this mental attitude is entirely unjustifiable. Hysteria is a nerve instability wherein the subject returns to the explosive responses to excitations which the higher types of

man have lost through dominance of inhibitory powers of the central nervous system. These secure a greater result from lesser expenditure of nerve force. Many tropho-neurotic phenomena occur in hysteria. These sometimes are due to an undue disturbance of metabolism resulting in high degrees of acidity and occasionally consequent on decreased oxidation. Dermatoneuroses of various types also result. From the frequent association of religiosity with hysteria such dermatoses have not unnaturally been assumed to be of "sacred" origin. Stigmatization is a marked effect of trophic instability. Few phenomena have attracted so much attention and excited such great awe among the populace, remarks Harriet Alexander.* In intensely devout continental European countries stigmatization plays a part in religious fanaticism. Cases occur in similar bourgeois canting districts in the United States. The following was reported several years ago by M. F. Coomes, of Louisville, Ky.† Several days before the first hemorrhage there occurred at the location of the future "wounds" red-looking spots. These continued to come nearer and nearer to the surface until the first bleeding came from them the first Friday in June, 1891. This continued regularly every Friday from that time for some years. All of the wounds do not bleed every Friday. On some few occasions one foot or hand does not bleed. Again a "wound" in the forehead may cease to bleed for two weeks, when it resumes its old condition and bleeds along with the other wounds.

The patient was found at Dr. Coomes' first examination in bed, lying on her back with her feet crossed and arms outstretched. On the top of each foot at the lower part of the instep there was a "wound" from which blood was issuing. There was also a wound in the palm of each hand, from which blood was flowing. There was a small "wound" in the margin of the hair near the center of the forehead (which looked as if it had been made with a blunt awl), from which blood was issuing. There was a "wound" in the left

**Medicine*, 1898.

†*Medical Standard*, Vol. XI, 1892.

side over the region of the ninth rib, from which a small quantity of blood had issued, with a considerable quantity of bloody water. She was seemingly suffering great pain. Contortions of the face and convulsive movements, particularly of the hands and arms, were present. The muscular system of the extremities and the back seemed in almost constant contraction. The convulsions resembled those which often occur in hysterics just precedent to complete anesthesia. There was sialorrhea. There was no grinding of the teeth, nor had she ever bitten her tongue. The general condition of the body during the convulsive state was at times one of extreme rigidity. The hands were clenched with the fingers and thumbs turned into the palms, the arms most of the time at right angles to the body, with the forearm strongly flexed upon the arm. During the paroxysms she would occasionally open and shut her hands. The usual position of the lower extremities was that of the left limb thrown over the right so as to place the left foot on top of the right.

The "wounds" in the hands and the feet during the intervals from Friday to Friday had little appearance of active inflammation. On Thursday, the blood-vessels in the immediate vicinity of the wounds would be somewhat engorged. The tissues in the immediate vicinity of the wounds, especially in the hands and feet, would be slightly swollen. By Friday morning would occur a decided fullness of all blood-vessels in vicinity of the wounds, but there would be no unusual heat accompanying this engorgement. Congestion in the immediate vicinity of the "wounds" continued on Friday until it resulted in hemorrhage. The crust would begin to rise, being forced up by the serous portions of the blood, which would first make its appearance in drops. This serum would gradually become mingled with the red corpuscles of the blood until the stream or drops would be ordinary blood. The hemorrhage at no time was great. On one occasion the hemorrhage from each foot amounted to as much as two or three drachms. The hemorrhage from the side was chiefly composed of the watery elements of the blood, sometimes a drop or two of pure blood coming out of

the wounds. That which issued from the forehead (the so-called wounds of the crown of thorns) generally appeared as pure blood, varying in quantity from two to ten drops. By Monday the wounds resumed their old condition, namely, that of an insignificant scar having almost no inflammatory action.

The patient went into the state of unconsciousness always about three o'clock. On Friday morning the patient seems very nervous and in deep thought. Once while discussing the appearance of certain marks on her body, she fell headlong to the floor in the middle of a sentence. On another occasion she suddenly became unconscious and would have fallen into the fire had she not been caught. Immediately after becoming unconscious her left foot is thrown across the right and the arms extended. Then the other phenomena already described begin and continue until about 6 P. M., when she becomes quiet, usually lays her head on her breast and apparently prays, although no sound escapes her lips. When she fully awakens it appears as though she had been aroused much exhausted from a deep sleep. This exhaustion continues during Saturday, although she rises and is able to work. At the onset of the unconscious state the patient rises to her knees, assumes a devout attitude of prayer, and so remains for about thirty seconds. She then falls down, apparently not knowing where she is going to fall.

The patient, though uneducated, talks intelligently about the topics with which she is familiar. She is a zealous, devout Catholic. Her general physical condition changed but little after the onset of the stigmatization October, 1891. November, 27, 1891, blood flowed from the back of the right hand as well as from the palms. December 4 was a hemorrhage from the sole of the left foot. This was the first from the bottom of either foot.

Coomes once waited three hours for the appearance of blood in the "wounds" of the feet. Finally about nine o'clock the crusts began to be lifted up, and in a few moments the serous portions of the blood began to ooze from beneath and slowly run down across the right foot. Ia n

few minutes the blood began to assume a pinkish color and then a red, until it had the appearance of ordinary blood. There were but a few drops from this foot on this occasion. The left foot commenced pouring out serum, which like that from the right foot, soon became red, and after a few drops had issued the flow ceased.

One crust (star-shaped, center of the forehead), one and one-fourth inches by one inch, had in the center a well defined cross. A second marking of the same kind occurred about ten days after the first appeared. It was a perfectly distinct cross four inches in length, with the base nearly half an inch wide. The outlines were so well defined that it appeared to have been produced by an actual cautery skillfully applied. This cross was located near the upper end of the sternum and slightly to the right of the center. A large red scar later occupied its position. The next markings, which appeared on the right shoulder, consisted of the letters I. H. S. These letters were about half an inch in length. They looked as if burnt with a wire stencil, the base of the letters being small. The next marking appeared on the right side of the breast some three inches below the middle of the clavicle. The usual burning sensations preceded the development of this mark. There was first a localized redness covering a small area. On the following day the redness had extended in such a manner as to resemble the letter H.

Coomes excludes fraud. A hysteric of the type described is, as Dr. Alexander remarks, subject to dermatographism. Dermographism probably produced the crosses and letters to which reference has been made. The dermatographic marks could easily then become the source of bleeding. The passivitic tendency hysteric to self-mutilation with amnesia of the same, readily explains the failure of the attendants to detect what might have been at the outset mere ecstatic nail imprints on a dermatographic hysteric.

That suggestion could produce all effects of stigmatization is seen in blistering produced by it. In 1840 Louis Prejalmin with "magnetized" paper produced the effects of

cantharides. As Bjornstrom remarks,* suggestion, not "magnetized" paper, caused the blistering. Bjornstrom found that by suggestion congestion may be produced, carried to raised swelling of the skin, to a blister like that of cantharides, to bloody transudation, and even to complete formation of a wound. Charcot and his pupils thus produced all the phenomena of burns.

Beaunis hypnotized a susceptible subject, and told her that upon awakening she would have red spots upon her forearm, which he tapped lightly, so as to avoid reddening from pressure. Ten minutes after awakening there was evident redness at the place touched, which increased in size, was visible about twenty minutes, and then gradually disappeared. By suggestion Beaunis caused the mark to remain forty-eight hours.

Facachon informed a hypnotized susceptible subject that a topoalgic spot would be blistered by cantharides. The next morning pain had vanished and blebs full of serum were present. He cured a right clavicular topoalgia in the same subject by suggestion during hypnotization of an actual cautery, with the seeming result of a burn.

Beaunis made several experiments on Facachon's subject. May 12, 1895, she was hypnotized at 11 A. M. On her back at a point unreachable by her hands a strip of eight gummed stamps was fastened. A similar strip had been eighteen hours on another patient without effect. Over these a compress was placed and the subject thrice told that cantharides had been used. She was closely watched during the day and hypnotized at night with instructions to awake at 7 A. M. At 8 A. M. Facachon removed the compress in presence of Bernheim, Libeault, Liegois, Beaunis, and others. When the stamps were removed the underlying skin over about five centimeters was thicker, yellowish-white, inflamed, but not blistered. Half a centimeter of the surrounding skin was intensely red and swollen. The spot was covered with a dry compress. Four hours later the spot, presenting the same appearance, was photographed. The photo-

*Bjornstrom: Hypnotism.

graph showed about five blisters. They increased the secretion of serum and later suppurated. Subsequently the arm of the same subject was blistered in like manner. Another subject suffered greatly from topoalgia. Facachon blistered her by suggestion below the left ear and on the left temple.

Facachon made cantharides inactive in the first subject by suggestion. Having by experiments on another patient determined that this cantharides blister was active, he used two of the three parts of the same blister on his subject. The third part was applied with due effect on a patient needing counter-irritation. The subject was hypnotized, one piece of the plaster placed on the left arm and the other on the right. The subject was told that the left arm would not be blistered while the right would. Nine hours later when the bandages were removed the left arm was normal and the right blistered.

Harriet Alexander reports the case of a hysteric in whom the neuropathic element was partly the result of environment. One evening a cutting from a roll of belladonna plaster was placed over a topoalgic spot on the neck. The same roll of plaster had been used on the other patients without dermic effect. A decided blister, however, appeared under the plaster. At the outset, while the possibility of untoward effects was taken into consideration, it was thought more probable that the blister was due to autosuggestion, as the patient believed that the object of the plaster was to blister. The blister healed rapidly under lanolin dressing and suggestion.

A control experiment was then made. Cantharides was applied about 9 P. M. without effect to a new topoalgic spot of which the patient had complained, the patient having been assured that it was simply a pain-curing plaster. The spot remained free from redness until about 9 A. M. the next morning, when an incautious remark of the nurse led the patient to surmise that a real blister had been applied. In an hour wheals followed by vesicles appeared and disappeared. The patient had been meanwhile informed that the nurse had unadvisedly used the term blister. The

cantharides plaster was carefully tested before being used in the control experiments. The patient, while extremely susceptible to suggestion, at no time was in the true hypnotic state.

It is obvious from these experiments from those of Krafft-Ebing*, Ross,† Mafille and others, and from the careful study made by Bourneville (especially of the ecclesiastically renowned Louise Lateau) that autosuggestion and dermographism play the chief part in stigmatization. The "crown of thorns" noticed by Dr. Coomes has not rarely been observed. Crosses, stars, I. H. S., etc., while not infrequently produced artificially in hysterics, have very rarely been followed by stigmatization.

"Crowns of thorns" are not unlike in appearance the "corona veneris" of secondary lues to whose production the remaining metamerie nerve functionalization is awakened by lues toxins. The forehead is hence predisposed to such disturbances. Other neuropaths and chronic invalids exhibit a tendency to stigmatization from suggestion. The marks resembling linear bruises so often found spontaneously in the insane are illustrations of this tendency†.

D. Soury ‡‡ has observed spontaneous ecchymoses in hysteric degenerate paranoiacs similar to those reported by Campbell Clark.‡ The general type was that of hysteric stigmatization. The patient had other hysteric stigmata. Brochial zona and hyperidrosis were also present. Like spontaneous hemorrhages have been reported by Froidefond,¹ Keller,** Gilles de la Tourette,†† and Althanasid.‡‡‡ In spinal cases Strauss and Tusan have observed similar phenomena.

More startling hysteric phenomena which seem to the unanalytic products of the supernatural likewise occur from suggestion. The "odor of sanctity" appears in neuropaths under sexual stress as the discussion of a paper by W. A. Hammond*** by the American Neurological Association over

*Hypnotism.

†Nervous Diseases.

‡Spitzka: Insanity.

‡‡Tribune, Med., Dec. 31, 1891.

**Jour. of Mental Science, 1879.

††Quelques Hemorrhages Neuropathique, These de Paris, 1879

‡‡‡Nobu. an con de la Salpet, 1890.

***Neurological Contributions, 1881.

¹These de Paris, 1882.

a quarter of a century ago has shown. Fere[†] reports two migrainous women, in whom during a migraine crisis, suddenly appeared, an orange colored halo around the head stretching out from it for eight inches. The skin of the head was then orange colored. In one these phenomena lasted several hours; in the other only a few minutes. A third case occurred in a woman who had a tendency to be suddenly awakened by subjective anxiety states with cardiac distress. The halo came with the anxiety. The influence of suggestion in the states described is enormous, but in all it was aided by emotional instability. In the last case of Fere anxiety with its resultant uncertainty was the dominating factor. I was called as medical counsel and expert by the Chicago City Railway Co. in the case of Dutton vs. C. C. Ry. Co. Here the following hypothetic questions fulfilling requirements of the Illinois Supreme Court* were put. Under the ruling of the Illinois Supreme Court no expert can testify as to any subjective symptoms obtained from the patient or as to their significance. The attending physician is, however, permitted to testify in this particular.

Assuming that plaintiff is about fifty-one years of age; that she has not yet developed the change of life; that her father was of nervous temperament, afflicted with insanity beginning in his twenty-fifth year and attacking him again later on, so as to be confined in an asylum in 1865, and again committed to an asylum in 1893; that the cause of his insanity was heredity; that his mother before him was for several years before her death insane; that his father had epilepsy and that some of his father's grand-children had epilepsy, that this lady for the past twenty or twenty-three years has been neurotic and hysteric, aenemic and sickly generally, that some of her brothers and sisters were of the same temperament and character; that one of her brothers was affected with paralysis, and has continued to be paralyzed in his lower limbs since he was a child, that his brother who is also paralyzed has marked curvature of the spine; that she herself in

[†]Rev. de Medicine, No. 4, 1905.

*C. C. Ry Co. vs. Bundy Ill. Reports.

1896 (in addition to having nervous spells, and giving a history of nervous debility and weakness of a chronic character for years preceding that) showed at that time inflammation of the stomach and a fermentative condition of the intestinal canal; that she at times complained of pain running from the back out over the hip and down the groin and the abdomen; that in 1896 she complained of womb trouble, and consulted a physician about examination and treatment; that this woman on the 7th of December, 1901, was a passenger on a street car going north on Wabash Avenue on the second seat of the grip-car of a train, consisting of a grip-car and three closed coaches; that she was sitting forward when the car collided with a coal wagon, but without sufficient force to throw her from the seat, or disturb anybody else in the car nor with sufficient force to disturb the driver upon the seat of the wagon; that she was made to incline forward by the collision and then back against the seat behind; that she remained upon her seat for a minute or so and then alighted from the car; the steps from the car being, the first, about fourteen inches from the floor of the car, where she had been sitting, that is where her feet had rested as she sat in the seat, and other steps about the same or more down to the ground. That she got off unaided, went around the head of the car and walked over to the west side of Wabash Avenue, north on the west side of Wabash Avenue to near Madison Street and entered a large department store, proceeded through the store to do her shopping; that she went out on the State Street side and walked from Madison to Adams Street, a distance of four blocks; that she then walked east again to Wabash Avenue and there boarded a train unaided, riding on the hind end of the grip-car from there (about 5 miles) south to 47th Street; that she walked from Cottage Grove Avenue over to Evans Avenue, where she resided, and went up to her apartments; the collision and these actions following, occurred about noon; that she got her supper that evening, and then went to a drug store and got medicine, but did not call a physician in; that she got breakfast in the morning; that about noon, twelve or one o'clock next day, she sent for

a physician who found her gagging and vomiting a little bile and mucus; that the amount vomited was about half a cupful; that she complained of a ring or girdle of hyperesthesia around the body over the navel and straight around the body; that she complained of this only once as far as the physician has any memory or record; the first day at the time that he called, of a pain called girdle-pain; that two days after the accident, a consulting physician was called in. On each side of the spinal column, not over the column itself, but on each side, was a red spot up about the eighth or ninth dorsal; that the consulting physician found her complaining of no pain except at the spots indicated as red, that her temperature at that time was about one degree above normal. That her pulse was accelerated to about 90; that a week or ten days thereafter, when the consulting physician called again, he found her complaining of nothing, except some pain at the spots indicated, and nowhere else. No complaints to him of anaesthesia or any girdle pain, or of any pain but that mentioned; that her temperature on the second call of the consulting physician was normal and he found nothing else the matter with her.

That the attending physician found her complaining of pains in the head, front and back; pains down the legs and complaints and some sensations of paralysis in the lower limbs, none of which were discovered or complained of to the consulting physician on either of his visits. Suppose that at the Baptist hospital, where she was for a month, she showed no evidences of motor paralysis and to the nurse who bathed, rubbed, attended to her, and had attended to her for three weeks, she made no complaints of any sensations or conditions of paralysis; and that she walked around the hospital with no apparent defect in her motion, but walked slowly. Assuming this state of facts, could you see any causative relation between the accident described and the symptoms described? To which my reply was that there was no causative relation.

Q. Assuming that she complained the day after the accident of a girdle of pain running around the body and that there is no recollection of anything of that kind after-

wards, what would you say as to the nature of it? A. That would be likely, from its fleeting character, hysterical.

Q. Assuming that the attending physician and the consulting physician obtained different expressions from her. The attendant obtaining from her expressions of various pains that were not given to the consultant, expressions of some notions of paralysis, partial paralysis or slight paralysis, as it is described, in the legs and that there was nothing of that kind complained of to the consultant, and no pains except the pain referred to the red spot over the ribs on either side of the spine, to what would that difference be attributable or what might explain it? A. Assuming those statements were in good faith they would be the effect of suggestion on a nervous subject.

Q. Explain what you mean by that? A. A physician who puts a question to a nervous patient in such away that the patient can in a measure anticipate the answer can secure a grave or a hopeful reply, according to the manner in which the question is put.

Q. Assuming that this woman now 51 years of age, has not yet gone through the change of life, would any deferred arrival of the menopause have any nervous effect on her? A. Yes, deferred menopause, in what is called the "dodging time" *would be peculiarly apt to result in nervous symptoms. The description of the "red spots" and their course indicated emphatically that they resulted from suggestion, not from traumatism. As they were the only evidence of traumatism this alternative hypothesis awakened the interest of the jury as explaining a factor seemingly indicating injury. To judge from the jury's questions and from their verdict in favor of the defendant company, they adopted the mental etiology of the discolorations as best explaining the facts and as excluding any other explanation, Mr. W. J. Hynes dropping the usual theory of pure fraud which so often prejudices a jury against a defendant corporation and dropping also the too often accepted theory of corporations that nervous results from accidents must occur immediately after these, took the bold, though scientifically correct, position that the

*Tilt: Change of Life.

patient's previous state, acted on by suggestion to which it predisposed her best, explained the alleged results of the accident. The case was conducted by Mr. Theodore G. Case for the plaintiff, with skill and conscientiousness. He was too badly handicapped, however, by his client's ignoring her previous history to succeed. The preponderance of scientific evidence was decidedly against the claim of the plaintiff who, without knowledge of the significance of her previous history, brought the action in good faith. Judge E. F. Dunne, who presided at the trial, exhibited none of the abiding sin of the judge of legislating on matters of law and fact. Utilization of stigmatization in fiction is not so frequent, Harriet Alexander remarks, as its striking features would seem to imply. As Nathaniel Hawthorne drew his "*Scarlet Letter*" in no small degree from tradition, his utilization of stigmatization is not surprising.

Puritan hysterics were not uncommon, as witness the case of Mary Chase, thus described by the Apostle to the Indians, John Eliot, in 1632. "Mary Chase, the wife of William Chase, had a paralytic humor which fell into her backbone, so that she could not stir her body, but as she was lifted, and filled her with great torture and caused her back to go out of joint and bunch out from ye beginning to ye end, with which infirmity she lay four years and a half and a great part of ye time, a sad spectacle of misery. But it pleased God to raise her again and she bore children after it." This case laid before Oliver Wendell Holmes* produced the following diagnosis: "I do not want to say anything against Mary Chase, but I suspect that getting nervous and tired and hysteric, she got into bed, which she found rather agreeable after too much housework, and perhaps too much going to meeting, liked it better and better, curled herself up into a bunch which caused her to look as if her back was really distorted, found she was cosseted and posseted and prayed over and made much of and so lay quiet until a false paralysis laid hold of her legs and held her there. If some one had 'hollered' fire, she would probably have jumped out of bed as many such paralytics have done under such circumstances.

*Chicago Medical Review, p. 297, 1881.

She probably could have moved at any time if any one could have made her believe she had the power of doing it. *Possumus quia posse videmur*. She had played possum so long, that at last it became *non possum*."

Considering the neurotic nature of Dimmesdale and the neuropathic tone of the time (as shown in the witchcraft epidemics), it is perfectly conceivable that autosuggestion and dermatographism would suffice to produce the scarlet letter revealed by the minister upon his own breast as he dies on the pillory.

"With a convulsive movement he tore away the ministerial band from before his breast. It was revealed. . . . Most of the spectators testified to having seen on the breast of the unhappy minister a scarlet letter—the very semblance of that worn by Hester Prynne—imprinted in the flesh. As regards its origin there were various explanations, all of which must have been conjectural. Some affirmed that the Reverend Mr. Dimmesdale on the very day when Hester Prynne first wore her ignominious badge had begun a course of penance—which he afterwards in so many futile methods followed out—by inflicting a hideous torture on himself. Others contended that the stigma had not been produced until a long time subsequent, when Roger Chillingworth, being a potent necromancer, had caused it to appear through the agency of magic and poisonous drugs. Others again—and these best able to appreciate the minister's peculiar sensibility and the wonderful operation of his spirit upon the body—whispered their belief that the awful symbol was the effect of the ever active tooth of remorse gnawing from the inmost heart outwardly, and at last manifesting Heaven's dreadful judgment by the visible presence of the letter."

Hawthorne on one occasion pictures Dimmesdale as a victim of that phase of autosuggestion taking the form of the type of obsessions or imperative conceptions which Edgar A. Poe—who knew them well from personal experience—called the "imp of the perverse."

"Before Mr. Dimmesdale reached home his inner man gave him other evidences of a revolution in thought and feeling. In truth nothing short of a total change in dynasty

and moral code was adequate to account for the impulses now communicated to the unfortunate and startled ministr. At every step he was incited to do some strange, wild, wicked thing or other, with a sense that it would be at once involuntary and intentional in spite of himself, yet growing out of a profounder self than that which opposed the impulse. For instance, he met one of his own deacons. . . .

Now during a conversation of some two or three momen

. . . it was only by the most careful self-control that the minister could refrain from uttering certain blasphemous suggestions that rose into his mind concerning the communion supper. He absolutely trembled and turned pale lest his tongue should wag itself in utterance of these horrible matters and plead his own consent for so doing without his having fairly given it. . . . Even with this terror in his heart he could hardly avoid laughing to imagine how the sanctified old patriarchal deacon would have been petrified by his minister's impiety. . . . Hurrying along, the Reverend Mr. Dimmesdale encountered the oldest female member of his church; poor, widowed, lonely, and with a heart full of reminiscences about her dead husband and children and dead friends as a burial ground is full of storied gravestones. . . . On this occasion, up to the moment of putting his lips to the old woman's ear, Mr. Dimmesdale, as the great enemy of souls would have it, could recall no text of scripture, nor ought else except a brief, pithy and, as it then appeared to him, unanswerable argument against the immortality of the human soul. The instillment thereof into her mind would probably have caused this aged sister to drop down dead at once, as by the effect of an intensely poisonous infusion. . . . After parting from the old church member, he met the youngest sister of them all. She was fair and pure as a lily that bloomed in paradise. As she drew nigh the arch-fiend whispered him to condense into small compass and drop into her tender bosom a germ of evil that would be sure to blossom darkly soon and bear black fruit betimes. . . . Before the minister had time to celebrate his victory over this last temptation, he was conscious of another impulse more ludicrous and almost as horrible. It was to stop short in the road and teach

some very wicked words to a knot of little Puritan children who were playing there and had just begun to talk."

It must be admitted that Nathaniel Hawthorne, as Harriet Alexander remarks, shares with Shakespeare the gift of preparing the soil for neuropathic symptoms which afterward appear, albeit he steeps his descriptions in a seventeenth century mental atmosphere.

From John Eliot's description it is evident that Puritanism had its hysteric miracles. The appearance of stigmatization would not be surprising under such a mental atmosphere of gloom and mysticism.

THE RIGHT MANAGEMENT OF AN HOSPITAL FOR THE INSANE.

A LETTER OF OPINION THEREON.

BY DR. C. H. HUGHES.*

I AM pleased, in the interest of humanity, and for the highest welfare of the insane, as I view that welfare from the vantage of a long clinical study of the subject, and personal familiarity with the needs of the insane as to management and care, to respond to your timely and pertinent inquiry.

It is not often that heads or members of legislatures, as you are doing, seek the light on this subject from sources of experienced observation. Too many legislators, when the important matter of the right care of the insane is under consideration, like some pseudo-alienistic experts before the courts, draw upon their inner consciousness and substitute fanciful conviction for the judgment of experience.

The care and cure of the insane is a medical matter. Everything about them, all help coming in contact with them, should conduce to their recovery and comfort. The aim should be cure rather than hopeless perpetual custody. Cure is economy as well as charity, the greatest of the virtues. Chronic lunatics are great enduring burdens on the state.

*The substance of a letter to Honorable Frank B. Jess, Speaker of the House of Assembly, New Jersey, in response to his inquiry thereon. This letter is here given to answer inquiries on the subject from other sources. Its substance was also included in the author's verbal address at the late Amsterdam Congress.

So that the highest as well as the lowest motives should make the abodes of the insane, hospitals, rather than asylums.

Every influence; discipline of employes, their retention or discharge, the manner of the attendants in speech or action and all employes who come in contact with the insane, their food, exercise, recreation, diversion, labor, amusement, work, clothing, apartments, reading, music, flowers, etc., as well as medicines, are prescriptions that may tend to promote, retard or prevent recovery. There are some so sensitive to odors that they might almost "die of a rose in aromatic pain" and some so entoned and enraptured over flowers, that their recovery sometimes dates from bouquets they receive and the kindly accompanying ministrations of speech and manner.

The color of a window shade, or carpet or wall, the pictures thereon, the rude or harsh or sweet persuasive melodious speech of physician or nurse or visitor or workman on the halls of a hospital may help or harm patients. There are patients who dread green (verdiphobiacs) or who fear red, who like soft, but are harmed by loud music, as of a military band, etc., etc. Many are moved in tranquil manner by concourse of sweet sounds and the minds of others are jangled out of tune and harsh in mental movement even by sweetest melody.

Medical superintendents of right knowledge and experience with the insane would not have the same views as to curative influence as inexperienced hospital stewards, as to the influence of things and environment on patients, and when differences exist as to who should go among the patients and what things or influence should not or should act upon them, the chief physician's directions should be the supreme law as a part of his prescription. The physician-in-chief should have as little business detail thrust upon him as possible, but his authority should be supreme in everything about the patient or concerning him—his food, his sleep and sleeping place and hours of sleep and time of waking, all management of him, for all these make up the prescription for good or ill of the maimed mind. All goes into the medicine and surgery of the mind as much as the "sweet oblivious

antidote" that "cleanses the stuffed bosom of that perilous stuff that weighs upon the heart" of the miserable melancholic, the morbid-minded hypochondriac or raving brain-racked maniac and sends them off to restful sleep. The taking of a patient from his home where the mental disease originated and where it is kept active by the causes that produced it in the beginning, is of itself a wise prescription which the humane States write for his benefit. A new and changed environment "doeth good like a medicine."

The nature of insanity—the brain waste being in excess of brain repair—requires tranquilization—diversion, rest and a cleansing out of toxins and the removal of all influences that irritate the brain or tax or poison or embarrass the general system in its fight with the disease, as much so as the inflamed eye that must have the light shut from it and the irritation removed, or the sprained or broken limb that requires the rest securing bandage and splints. There is a surgery and medicine for mind and brain as for the lower body, and science from experience of long skilled observation can "minister to a mind diseased" and "raze out the written troubles of the brain." But to do this well the psychiatric physician should not be impeded in the management of the patient's entire environment and all the means conducive to cure.

Because of therapeutic considerations such as these, the statutes of Missouri provide that "the superintendents of its hospitals for the insane shall be the chief executive officers thereof," having the care and control of everything connected therewith *subject only* to the rules and regulations of the board of managers.

The state furnishes and the board provides rules for a steward, treasurer, engineer, florist, gardener, farmer, dairyman, bookkeeper, and under guidance of the board and its rules and regulations, the chief medical officer regulates the conduct of these subordinate employes in all their relations to the institution and its patients, *subject only* to the board's control and the rules it makes for its subordinates.

It is because everybody and everything about an insane hospital may hurt or harm a patient that medical control

and direction should be paramount, as it is in a sanitarium or in a hospital ship of the American navy. This does not imply interference with the legitimate work of other employes, but gives medical regulation and control to the chief medical officer for the welfare and sometimes the salvation of the sick.

Methods of meeting, managing and providing for the insane require medical experienced guidance and control. The inexpert would not always harmonize with the expert in their treatment without supreme medical control in these matters. A carpenter or a plumber may set back certain patients by displaying his tools so that certain patients have to be put in other parts of the house while certain work, which would appear harmless to the experienced, is going on.

The insane hospital ship should be commanded by a sea worthy captain. He need not himself be an engineer or a boatswain, but he must see that no harm is done to the passengers or cargo and that she sails on the right course.

The after care of the insane is also an important subject, essential to the converting of convalescence from insanity into sure and permanent recovery, which, because not germane to the inquiry will not here be trenched upon. Good men, however, familiar with the subject are taking the matter up and developing right interest in it. If they should leave any word to be said which we think might be further said in the interests of the welfare of the insane, we may later say it.

In this connection the propositions of the association prepared, presented and published by the association of superintendents of American institutions for the insane, now the American Medico-Psychological Association, might be read with profit by trustees, states or individuals concerned with the important subject of the care, treatment and general welfare of the insane, either in the United States or in other countries.

BROMIN COMPOUNDS WITH SPECIAL REFERENCE TO STRONTIUM BROMID.*

BY WILLIAM J. ROBINSON, M. D.

New York City.

BROMIN is comparatively a new remedy. Seventy-five years ago it was unknown in therapeutics. For instance, if you take Paris' Pharmacologia, published in 1825, which, by the way, for the breadth of its views, for the philosophic insight into the fundamental principles of medicine, will compare very favorably with the text-books published in 1907, you will find no mention of the word bromin or bromid. Bromin had not yet been discovered at that date. It was discovered one year later, in 1826, by Balard of Montpellier, who at first named it *muride* (from *muria*-brine, the source from which he prepared it originally and from which the name muriatic acid is derived); later, at the advice of Gay-Lussac, he changed the name to bromin (from *bromos*, a stench), to indicate its extremely irritating odor.

We will not spend much time on bromin, as it is practically not used as a therapeutic agent at the present time, and there is no reason for its being official. Suffice it to say that during fifteen or twenty years after its discovery it was, on account of its chemical similarity to iodine, considered, therapeutically, the same as the latter. Thus, for instance, Pereira in his "Elements of Materia Medica and Therapeutics" (Edition 1846) says: "It (bromine) seems to possess the same therapeutic influence as iodine, and has been administered in bronchocele, in scrofula, in tumors, in amenorrhea and

*A clinical study read in the Section on Pharmacology and Therapeutics of the American Medical Association, at the Fifty-eighth Annual Session, held at Atlantic City, June, 1907, and published in the Journal A. M. A., Jan. 18th, 1908. This is the best contribution of the year to this subject and so valuable that we transcribe it entire to our pages from the Association Journal. The discussion which followed in the Section coincided with the author.

against hypertrophy of the ventricles. It is usually regarded as possessing more activity than iodine."

This error of considering two substances therapeutically similar or identical, because their chemical properties are similar or identical, is still indulged in by some pharmacologists of the present day, but it is an error against which we should guard most carefully, as it is apt to lead us astray most ignominiously.

For many years after the discovery of bromine, potassium bromide was the only one of its compounds used in medicine. It was introduced into the London Pharmacopoeia in 1836, and the reason it was introduced was because Dr. Williams reported great success from its use in a case of enlarged spleen. He thought that it possessed "unusual, if not specific, powers in the cure of diseases of the spleen." As you see, it got into the pharmacopoeia under false pretenses, but we have allowed it to stay there because it showed that it possessed decided therapeutic powers in other directions. At first it was simply used as an adjuvant to or a substitute for potassium iodide. It was used in bronchocele (the old name for goiter), scrofula, syphilis, etc. Robley Dunglison says in his "General Therapeutics and Materia Medica" (Lea & Blanchard, 1843): "The effects of bromide of potassium on the economy appear to resemble those of iodide of potassium. It has been used in goiter, scrofulous affections, enlarged spleen, chronic cutaneous diseases, etc., but it is not much prescribed."

It is rather remarkable that it was Ricord himself, the greatest syphilographer of the nineteenth century, who thought favorably of the use of potassium bromide in secondary syphilis. He claimed that it acted similarly to potassium iodide, though more slowly. We know now, as Ricord came to know later on, that the effects of potassium bromide in syphilis are nil; if it does act, it acts injuriously, by deranging the digestion, producing an eruption of its own, thus confusing the physician, etc. And this goes to show that the greatest authority can be mistaken, and that no *ipse dixit* of authorities or text-books must be accepted blindly. For it took quite a few years of useless trials, and of useless in-

jury to patients, before the inefficiency of potassium bromid in syphilis was recognized.

In the fourth decennial revision of the U. S. Pharmacopeia, published in 1864, potassium bromid was the only bromin compound official, and it was in the sixties that the proper status of potassium bromid in therapeutics became pretty well established. Sodium bromid only became official in the sixth edition of our pharmacopeia, published in 1883, and until that year it was, according to some of our friends who tell us to limit ourselves to official preparations only, criminal, or at least highly reprehensible, to employ sodium bromid on our patients. Strontium bromid was made official in the seventh revision of the Pharmacopeia, published in 1894, and the bromid compounds official in the present Pharmacopeia are as follows:

INORGANIC.

Acidum Hydrobromicum.
Calcii Bromidum.
Ammonii Bromidum.
Lithii Bromidum.
Potassii Bromidum.
Sodii Bromidum.
Zinci Bromidum.

ORGANIC.

Bromoformum.
Camphoræ Monobromidum.
Hyoscinae Hydrobromidum.
Hyoscyaminae Hydrobromidum.
Homatropinae Hydrobromidum.
Quininæ Hydrobromidum.
Scopolaminae Hydrobromidum.

These are the fourteen official compounds, seven inorganic and seven organic. But it seems that in our hustling, restless, nervous and neurasthenic age this number is not sufficient. Our people apparently need sedatives, for the number of bromin compounds is constantly increasing, and only to-day, while writing this paper, a new bromin compound, defined chemically as the mono-brom-iso-valerianate of urea, has come to my attention.

Having mentioned the official bromin compounds, it will not be out of place to give here a brief enumeration of the non-official bromin derivatives. I shall not attempt to mention every one that has been brought out by the enterprising manufacturing chemists, but only those which have come more or less into use.

Antisepsin, also called asepsin, is chemically bromanilid or bromacetanilid. It is a white crystalline powder, practically insoluble in water, but soluble in alcohol and ether, and is used externally as an antiseptic and to a slight extent internally as a sedative and antipyretic. The internal dose is one to two grains.

Bromacetanilid. See antisepsin.

Bromalbacid. This is an albumin bromin compound. It is a yellowish white powder and is given in doses from 5 to 20 grains. The usual claim is made for it that it is well borne, does not disturb the stomach and does not produce acne.

Bromalin is also known as Bromethyformin. It is a white crystalline powder, soluble in water, and is claimed to combine the actions of both a sedative and a urinary antiseptic. It is given in doses of 15 to 60 grains.

Bromanilid. See Antisepsin.

Brom-eigon is also an albumin bromin compound containing about 10 per cent. of bromin. It is a whitish powder, insoluble in water and practically odorless and tasteless. Dose 15 to 30 grains.

Bromethylformin. See Bromalin.

Brometone is chemically tribrom-tertiary-butyl alcohol. It is a white crystalline powder having a camphoraceous odor and taste. Very slightly soluble in water, but soluble in alcohol. Its good effects in epilepsy and as a general sedative seem to be pretty well established. Dose 5 to 15 grains.

Bromipin is a combination of bromin with oil of sesame. It is marketed in two strengths, one containing 10 per cent. of bromin and one containing 33.3 per cent. The latter product, however, is practically not used in this country. The product is a yellow oily liquid of a slight odor and very disagreeable taste. Some people are utterly unable to stand it, as it sometimes causes unconquerable nausea. In epilepsy its value is pretty well established; but as an ordinary sedative and antispasmodic where quick action is desired it is worthless.

Bromocoll is a compound of bromin with tannin-gelatin. It contains about 20 per cent. of bromin. It is a yellowish powder, odorless and practically tasteless, insoluble in water or alcohol, but soluble in solutions of alkalies. When an

aqueous solution of it is desired, borax is the best addition. This compound is used both internally and externally. Internally instead of the alkaline bromids, and externally to allay pruritus. For the latter purpose it is used in the form of a 20 per cent. ointment.

Bromofarina is a flour containing sodium bromid instead of sodium chlorid, and the bread made from it is called Bromopan. It is used in epilepsy instead of ordinary bread.

Bromoprotolin is another of the numerous albumin-bromin compounds containing 10 per cent. of the latter element.

Bromopirin is antipyrin in which one atom of hydrogen has been replaced by one atom of bromin. Unlike antipyrin, it is insoluble in water, but soluble in alcohol. It is claimed to combine the properties of both a sedative and an antipyretic and is given in doses of 10 to 30 grains.

Brompepton is similar to brom-eigon.

Bromprotulin is a combination of bromin with a phosphorus albumin compound said to contain 4 per cent. of bromin. Dose 5 to 20 grains.

Bromural is the latest bromin derivative and is chemically manno-brom-iso-valerianate of urea. It is in the form of white scales, soluble in hot water, alcohol and alkalies. Its taste is slightly bitter, its property is hypnotic, its dose is from 5 to 10 grains. Of course, it is claimed to be, like all new hypnotics are, harmless, free from the danger of inducing a habit, etc., but as I have said many times before, there is no such a thing, and probably never will be, as a perfectly harmless hypnotic.

Monobromphenol is carbolic acid in which one atom of hydrogen has been replaced by one atom of bromin. It was recommended for external use in various skin affections, but it has not gained any ground.

Neuronal is chemically bromdiethyl-acetimid. It is a crystalline powder, slightly soluble in water, but very soluble in alcohol. It has been recommended as an hypnotic in doses of $7\frac{1}{2}$ to 30 grains.

Tribromphenol, also known as bromol, is chemically carbolic acid in which three atoms of hydrogen have been re-

placed by three atoms of bromin. It is in the form of whitish crystals, generally turning reddish, insoluble in water, but soluble in alcohol and glycerin. It is hardly ever given internally now, but it is still occasionally used externally.

Xeroform is chemically tribromphenolbismuth. It is a yellowish powder, practically odorless and tasteless in water, alcohol or glycerin. It is used externally as a surgical antiseptic and internally as an intestinal antiseptic and astringent. The dose for internal use is 10 to 30 grains.

We will now stop for a moment and see what the real therapeutic status of the bromids is. I do not wish to refer to disputed or uncertain points, but only to facts to which I can certify from personal knowledge and experience.

The bromids are positively useful as anaphrodisiacs; that is, they do act as sexual sedatives. They will prevent chordee, they will prevent night emissions, they diminishing the *libido sexualis* in continent people. They are useful in convulsions, in nervous headaches, in general nervous irritability, and in mild insomnia due to excitement or worry but not to pain or inflammation. They are positively useful in strychnin poisoning, though in one case of strychnin poisoning which I treated—successfully—I used them in conjunction with chloral hydrate. (They are stated to be useful in tetanus if given in very large doses, but I have had no personal experience in this direction.)

In puerperal eclampsia they are, in my opinion, contraindicated. They are useful in diminishing the epileptic seizures in epilepsy—there is no question that they do that, but that does not mean that they are the best remedies to use in epilepsy. They do not cure the disease, and the injurious effects of the potassium, where potassium bromid is the salt employed, overbalances the beneficial effects. Some one has said that Julius Cæsar and Napoleon Bonaparte should have thanked their stars that potassium bromid had not yet been discovered in their times. And I agree with him. For I believe that if they had fallen into the hands of a good orthodox physician who had filled them with large doses of potassium bromid they would not have accom-

plished what they did and their names would not have gone down to posterity.

But I might as well say it now as later on in the paper, that I blame the potassium more than I do the bromin. Potassium is a peculiar element; in organic combinations, such as the acetate, bitartrate and particularly the citrate, it is a mild element. In the haloid combinations it is toxic and irritating, and should be used as little as possible and as seldom as possible. Particularly in diseases in which it needs to be used for a long time, such as epilepsy, it should not be used at all. For there is no question that used for months or years it disorganizes the blood, weakens the cardiac muscle and permanently affects the mental faculties.

In my practice I have often been in need of a positive sedative—either a general nervous sedative or one with special reference to the genito-urinary system. Of course the first drug used was potassium bromid. It acted satisfactorily as far as the special symptom for which it was administered was concerned, but it did not take me long to notice that the by-effects and undesirable symptoms it produced far outweighed its therapeutic value. And I wish to say right here that the worst effects of potassium bromid, such as acne, furunculosis, ulceration, gastrointestinal irritation, mental and physical depression, etc., are not due to the bromin alone, as is generally thought, nor to the potassium alone, as is thought by some, but to the potassium bromid as a whole, as an entity.

That it is not due to the bromin alone you can convince yourself by giving the same amount of sodium bromid for the same length of time, and you will see that the undesirable symptoms are very much milder. And this is the more convincing from the fact that sodium bromid is stronger in bromin content than potassium bromid is, sodium bromid containing 77.6 per cent. of bromin and potassium bromid only 67.1 per cent. That it is not the potassium alone that does the mischief you can readily convince yourself by giving, say 15 gr. doses of potassium bitartrate for a long period. While we are constantly inculcating in our students' minds that in thinking of a compound we must, so to say, forget the com-

ponent elements and think of the compound as a whole, still the base or acid radical is often too prominent in the physician's mind. It is true that in many compounds the basic radical overshadows the acid one or vice versa, still we must bear in mind that the compound is an entity and that either radical is strongly modified by the other. And when a patient takes potassium bromid and gets a nasty acne, it is wrong to speak of it as a bromid acne, because it is a potassium bromid acne.

As I said before, potassium bromid was too toxic an agent for me, and the next salt used was sodium. This was more satisfactory than the potassium salt in every way, but it did not fully satisfy me, for while it is much less likely to cause acne and general depression, sensitive stomachs stand it almost as badly as they do potassium bromid. Lithium bromid does not act energetically enough, and this is certainly strange when we take into consideration that lithium bromid contains the largest percentage of bromin of any official salt, namely, 92 per cent., which again goes to prove that you can not judge of the action of a compound by its percentage composition. Ammonium bromid and calcium bromid presented no advantages that I could notice, and they were quickly discarded. Rubidium bromid acts nicely but is too expensive for ordinary use.

My choice finally fell on strontium bromid and, after a most careful and painstaking experimentation, I am ready to declare it is the very best bromid combination. Potassium bromid I have discarded entirely, and in my opinion it ought to be entirely discarded from our therapeutic armamentarium. The question is not whether it acts as a sedative or not; it does. But, as I mentioned before, its injurious effects so much overbalance its value that it is more than unwise to use it and retain it in the Pharmacopeia.

The strontium salts were introduced to the medical profession in 1890 by Professor Laborde, who, I assure you, must not be held responsible for labordine. He has had no more to do with labordine than Lister with listerine or Koch with kochin. The reports of the strontium salts were unequivocally favorable and strontium bromid became official

in the U. S. P. in 1890 (published in 1894). A number of contributions have appeared on the superiority of the strontium salts over those of the alkalies and other alkaline earths, the latest being J. M. Bennion's report from the Oxford County Asylum on the superiority of strontium bromid in the treatment of epilepsy.* But I will not refer to them, because it is my purpose to detail my own experience and report my own personal results. There is too much copying from other authors and text-books, and thus an error reported by one becomes multiplied a thousandfold. And the exhaustive bibliographies attached to many papers are nothing but useless "show-off" appendages. Bibliographies are in place in articles which are distinctly and frankly resumes of other people's work, but not in original reports.

I have used strontium bromid in about 200 cases, used it skeptically, analytically, using the other bromids at the same time in other patients, as controls, and my results justify me in stating that the real value of strontium bromid is not appreciated by the medical profession. Besides its distinctly sedative (bromid) effect it possesses a soothing effect all its own, for which credit must be given to the strontium radical. It is remarkable that as a urinary-vesical-sedative and anaphrodisiac it is more effective, grain for grain, than potassium bromid, and that, notwithstanding the fact that the latter contains about one-third more bromin than the former (potassium bromid contains 67 per cent., while strontium bromid contains only 45 per cent. of Br.).

Strontium bromid does not upset the stomach, nor cause cramps, colic or diarrhea as potassium bromid sometimes does. It does not irritate the kidneys; rather the contrary, it reduces renal irritation, in which property it is similar, to a certain extent, to the lactate of strontium. Under its administration you can often notice a diminution of albumin in albuminuria and of sugar in glycosuria. It never produces acne. I said "never," but I do not like the words "never" and "always" in medicine. Under the administration of large doses over a long period of time, two or three per cent. perhaps will develop some acne pustules, but they are mild and transient.

Not only this, but I have had a number of patients state that their digestion has improved under its use. This is quite possible, if we bear in mind that the strontium salts possess decided, though mild, antiseptic properties. One might suggest that the improvement in the digestive functions might have been due to the general improvement caused by the associate treatment. Perhaps. It is strange, however, that I have never had a patient tell me that his digestion improved while taking potassium bromid.

I can speak with positiveness on this subject because I have had some patients who, for moral or other reasons, had to lead a continent life and who were taking the strontium bromid as an anaphrodisiac for several months at a time. Besides the mild and transient acne, there were no other by-effects that they or I could notice.

I advise you all, whenever you have occasion to administer a bromid, to use strontium bromid in preference to any other. But of one thing you must make sure—that your strontium bromid is *pure*, absolutely pure, or at least of pharmacopeial purity, for commercial strontium salts are contaminated with barium, and barium is a distinct poison. And if you get a strontium salt which contains a large percentage of barium you will get more gastrointestinal irritation and more toxic, depressing symptoms than from potassium bromid. In fact, the reason strontium salts came so late into medical use was on account of their general contamination with barium salts, which made their employment dangerous and gave rise to the idea that the strontium salts were toxic. The strontium salts are not toxic—no more than the calcium or magnesium salts are.

Whenever I had a patient complain of irritation in the stomach, or of nausea, investigation disclosed the fact that he was getting a cheap commercial bromid in which chemical analysis easily disclosed the presence of a considerable amount of barium salt. The test for the detection of barium in strontium salts is easy, and whenever the physician has reasons to doubt the purity of salt he should apply it him-

self. It is performed as follows: Fifteen grains each of strontium bromid and of sodium acetate are dissolved in 75 min. of distilled water, about 5 to 8 drops of diluted acetic acid are added, and then 5 drops of potassium bichromate test-solution. A cloudiness or precipitate indicates the presence of barium, and such salt should be rejected.

What is the dose of strontium bromid? I have long ceased to go by text-book doses. Each patient is a law unto himself, and so is each condition. But as a general rule I start with 10 to 15 gr. doses, increasing to 30 grains three times a day. In some cases in my practice I find it more advantageous to administer one large dose—60 to 90 grains—at night. I usually give it dissolved in distilled water, without any other addition. But when it is necessary to administer it for a long time it is best, both for physical and psychic reasons, to add a corrigent and change it every two or three weeks. The following are good formulas:

R.	gm. or c. c.	
Strontii bromidi.....	30	3i
Essentiæ pepsini.....	30	or 3i
Aquæ menthæ piperitæ ad	180	3vi
(Vel amygdalæ amaræ.)		
M. et sig.: One teaspoonful as directed.		
R.	gm. or c. c.	
Strontii bromidi.....	30	3i
Tincturæ cardamomi compositæ.....	15	or fl 3ss
Aquæ ad	180	fl 3vi
M. et sig.: One teaspoonful as directed.		

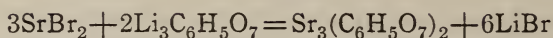
INCOMPATIBILITIES.

While strontium salts have several incompatibilities the principal ones are the citrates and sulphates, as illustrated by the following two prescriptions which came to my notice recently:

R.	gm. or c. c.	
Strontii bromidi.....	15	3ss
Lithii citratis.....	20	3v
Tincture hyoscyami.....	5	or m. lxxx
Syrupi simplicis	20	fl 3v
Aquæ	100	fl 3iiiss
M. et sig.: Two teaspoonfuls three times a day.		

This makes a nasty mixture, because a double decomposition takes place, with the formation of a heavy pre-

precipitate of strontium citrate as shown by the following equation:



And I might add, by the way, that this prescribing of lithium citrate and strontium bromid in the same mixture is for some reason very common, but the two salts are strictly incompatible and should never be prescribed together.

The second incompatibility is illustrated by the following prescription:

R.	gm. or c. c.	
Aquæ	60 016	gr. $\frac{1}{4}$
Strontii bromidi	8	ʒii
Atropinæ sulphatis		ʒii
Acidi sulphurici aromatici	8	ʒii
M. et sig.: Teaspoonful at night.		

This has been given to a consumptive patient for night sweats and insomnia. This is absolutely incompatible, as it decomposes the strontium bromid, forming a precipitate of strontium sulphate.

Strontium bromid is also incompatible with the alkalis, but this is due to the bromid radical and not to the strontium. As you know, all bromids are more or less incompatible with alkaloids though the danger of a bromid of the alkaloid being formed and precipitated has been rather exaggerated and is very slight, indeed, if the mixture contains as little as 10 or 12 per cent. of alcohol.

SUMMARY.

To summarize the most salient points that I wish to impress on your mind:

1. The bromids are valuable and sometimes indispensable agents.

2. Potassium bromid is the worst bromid we possess, its undesirable by-effects by far overbalancing its therapeutic value. Whoever administers potassium bromid in large doses for a long time is simply slowly poisoning his patient.

3. Sodium bromid is a much milder bromid, and when chemically pure strontium bromid is not available sodium bromid is the salt of choice.

4. Strontium bromid is the best of all inorganic bromin compounds. It is a positive (a) anaphrodisiac; (b) it is a positive nervous and genito-urinary sedative; (c) it does not upset the stomach; (d) it does not produce acne, or if it does produce a few acne pustules they are mild and transient; (e) it often acts as a mild intestinal antiseptic; (f) it does not irritate the kidneys—rather the contrary, and (g) it has a tendency to diminish albumin in albuminuria and sugar in glycosuria.

5. The dose of strontium bromid ranges from 10 to 60 grains three or four times a day. Occasionally it may be given in doses of one or two drams. It is best prescribed dissolved in distilled water with the occasional addition of essence of pepsin, tincture of cardamon, etc.

6. Strontium bromid is incompatible and should not be prescribed with citrates or sulphates, and it is also best to avoid prescribing it with alkaloids.

7. To obtain the good results from strontium the salt must be chemically pure. If contaminated with barium, as the commercial strontium salts not only frequently but usually are, its effects will be disappointing and its untoward by-effects may be more severe than those of potassium bromid.

12 Mount Morris Park, West.

DISCUSSION.

DR. WILLIAM STEVENS, New York City, stated that while he was a student with an old army surgeon in 1873, he became accustomed to ordering bromid of potassium frequently. It seemed at that time to be an invaluable remedy. Since that time a careful investigation of some cases has convinced him that he used it too much, and that it is a very unsafe remedy.

DR. C. F. TAYLOR, Philadelphia, thought that the force of habit is well illustrated in the continued large use of potassium bromid to the neglect of sodium bromid, which has long been known to be less injurious and in many respects a better drug than the potassium salt; but, he continued, the strontium salt is superior to either the sodium or potassium salt, and for several years he has been recommending the strontium salt above all others.

DR. W. E. ROBERTSON, Philadelphia, called attention to the work on diseases of the heart written by Napoleon's physician, Corvisart, in which Napoleon's symptoms are described in such a way as to lead to no more definite conclusion than that his was a case of bradycardia, and probably to-day, instead of receiving bromids, as Dr. Robinson suggests, he would have been subjected to a very careful system of cardio-vascular tracings, where it would probably end.

DR. W. W. TOMPKINS, Charleston, W. Va., was convinced that the bromid of potassium is the most toxic of the bromids. Dr. Robinson's paper, he said, went very exhaustively into the use of the bromid of strontium, except that he failed to mention its use in cases of indigestion. In some of these cases it is largely used combined with aromatics, such as peppermint water. Dr. Tompkins thought that there is not very much individual opinion exercised on the part of the individual prescriber. He is so apt to give only those prescriptions that appear in the text-book. He believes, further, that there is a decided idiosyncrasy in bromids, particularly, and that one can get decided beneficial effects with small doses thoroughly diluted. They are also less dangerous than large doses.

DR. C. B. LOWE, Germantown, Pa., was under the impression that the ill effect from potassium salts is because they act on the heart muscle as strong depressants, and that that is one of the reasons why sodium salts are usually selected.

DR. W. J. ROBINSON, New York City, emphasized the superiority of strontium bromids over potassium bromid. Through force of habit, he said, whenever physicians think of bromid, they think of potassium bromid, and therefore he emphasized the dangers attending its use. He mentioned the fact that strontium bromid acts as a gastric antiseptic, and it is very good in so-called nervous dyspepsia. Dr. Robinson replied to Dr. Lowe that Dr. Bennion reports that they treated one class of their epileptics with mixed bromids and the other class with strontium bromid only, and they reached the conclusion that the strontium bromid is superior to the mixed bromids.

IS GENIUS A SPORT, A NEUROSIS, OR A CHILD POTENTIALITY DEVELOPED?*

BY JAS. G. KIERNAN, M. D.,

CHICAGO.

Fellow Chicago Academy of Medicine, Foreign Associate Member French Medico-Psychological Association; Honorary Member Chicago Neurologic Society, Honorary President Section of Nervous and Mental Disease Pan-American Congress 1893, Chairman Section on Nervous and Mental Diseases American Medical Association 1893; Professor Neurology Chicago Post-Graduate School 1903; Professor of Nervous and Mental Diseases Milwaukee Medical College 1894-5; Professor of Nervous and Mental Diseases Illinois Medical College 1905; Professor of Forensic Psychiatry Kent-Chicago College of Law.

IN discussing psychologic problems from the biologic viewpoint certain preconceived notions must be cleared away. Man is not an entity, but an evolution. He is moreover not a product of metazoal embryogeny alone, but likewise of these previous protozoal states which produced the metazoa. Sex usually started from as an absolute entity like all complex functions, is an evolution. All alleged laws of metazoal embryogeny affect merely the typic forms. They are often modified by protozoal reversions. To deal with the question of "sports," or potentialities, these last must be severely taken into account. Potentiality is an expression, either of powers retained from early types or of functions gained later in the struggle for existence. Vertebrate stigmata like the notochord occur in embryogeny ere vertebrate type is discernible in other organs. While recapitulation of ancestral phases occurs in embryogeny, evolution may proceed without

*Continued from *Alienist and Neurologist*, May, 1907.

†De Mar: Evolution by Atrophy.

leaving traces of the various stages. This is particularly true of complex organs which have been produced by many lines of evolution converging in a single structure—a structure which thus becomes the seat of a special function or group of functions. Reappearance of one of these lost stages may occur, resultant disturbance of balance may produce excess in this one particular with deficiencies in others. Reparative powers such as those of the hydra (which underlie the alleged “freak” reproduction* of the extirpated eye of the tadpoles) is an expression of the condition whereby the simplest organisms leave off where the higher animals and plants begin—as a unit mass of living matter.† They correspond to the reproductive cells of higher animals. Among the loose colonies formed by some protozoa which bridge the gulf between them and the metazoa there is seen the separation of special reproductive cells and the beginning formation of a “body.” The ordinary protozoan (a single cell) forms no body. It divides and multiplies, but the products of division go asunder. In most there is no body, with no death; an “immortality” seemingly occurs. This occurs likewise with the reproductive cells of the metazoa. The body dies, but the reproductive cells escape before death to live as new organisms including new reproductive cells. In loose colonies of protozoa (*Volvox*) is sometimes seen the beginning change which introduces death. The cell which starts one of these colonies divides; the products of division instead of separating as usual remain connected; a loose body of many cells is thus formed. In this certain elements are set apart in turn and adrift eventually as reproductive cells. They start new colonies and thus the constant feature of the metazoa is foreshadowed in the protozoa. The metazoan body is more, however, than a loose cluster of cells. It is a complex balance refined in degree of inhibition with its rise in the scale of being. The reproductive elements for this reason are liberated from definite regions which become specialized as organs. Sex differentiation in the cells under such conditions, at first foreshadowed, becomes later a potentiality, then a function.

*On which E. B. Wilson, of Columbia University, has rather illogically laid such sensational stress. *Current Literature*, August, 1908.

†Geddes-Thomson: *Evolution of Sex*.

The absolute distinction drawn by Weissman* between the germ plasm and the body plasm is hence not justified as affecting the protozoa generally and would but slightly affect even the Volvox. In the metazoa reversions due to imperfect assimilation of, or supply of nutriment, occur interfering with the absolute separation. That such disturbances of nutrition affect the separation of the germ plasm and body plasm and cause a return to the unity of the protozoa, is shown by the Naples aquarium experiments.† Variation, therefore, as Weissman admits, may appear independently of selection and amphotaxis from constant occurrence of slight inequalities of nutrition in the germ plasm.** Such nutritional inequalities must be produced by nutritional disturbance of the body containing the germ plasm ontogeny (development of the individual), hence necessarily affects and is affected by phyllogeny (development of the type.) The nutritive, vegetative self-regarding processes within the plant or animal are as opposed to the reproductive, multiplying species regarding processes as income to expenditure or building up to breaking down.‡ The contrast between these two processes occurs throughout nature whether in alternating phases of cell-life or in the antitheses of growth and reproduction. A sponge, a hydra, a sea anemone may be cut to pieces with the result that each fragment grows into a new organism. This shows how far from unique is what is called reproduction. That reproduction is more or less discontinuous growth, appears in the evolution onward insensibly from continuous budding, as in sponge or rosebud, to discontinuous budding as in hydra, zoophyte or tiger-lily, when the offspring vegetatively produced are sooner or later set free. The enormous expenditure of force required in unicellular reproduction is lessened by satisfaction of cell hunger through conjugation with another cell. This making two cells do the work of one, lessens the amount of nutritive force required from each.

Fertilization evolution has the following stages:

*The Germ Plasm.

†*Alienist and Neurologist*, 1900.

**Germ Plasm, p. 431-565.

‡Geddes-Thomson: *Evolution of Sex*.

I. Formation of Plasmodia; II. Multiple Conjugation; III. Conjugation of Two Similar Cells; IV. Union of Incipiently Dimorphic Cells; V. Fertilization of Differentiated Sex Elements.

By the time conjunction of two similar cells is reached, the paranucleus in both is incipiently hermaphroditic.†

Reproduction is part of assimilation. Dallinger and Drysdale describe how fission of the monad is preceded by absorption of one form by another. One monad fixed on the sarcode of another, and the substance of the lesser or under one passed into the upper one. In about two hours the merest trace of the lower one was left, and in four hours fission and multiplication of the larger.

Conjugation occurs when nutrition is diminished—whether this be due to want of light, or the lower temperature of autumn or winter, or to a reduction of the organism to minimal size, it is a necessity for satisfaction of a gnawing hunger which draws the animal to engulf its neighbor; to isophagy. The process of conjugation is only a special form of nutrition which results on a reduction of the nutritive income or an increase of the nutritive need.‡

According to Cienkowski conjugation is equivalent to rapid assimilation. Maupas, has shown that: without conjugation the members of an isolated family of infusoriæ eventually cease to feed and divide and pass through the stages of degeneration and senility to extinction.††

The impelling force leading to conjugation is, as Rolph has shown,** cell hunger. Conjugation is a necessity for satisfaction, a gnawing hunger which drives the cell to engulf its neighbor. This process is only a special form of nutrition which occurs because of a reduction of nutritive income or an increase of nutritive needs. In dealing with any problem whether psychologic, physiologic, pathologic, or nosologic there must be considered the evolution of metazoa. Man, like other metazoa is a society of simpler beings of cells and cell systems or organs, each having its own func-

†Maupas: *Evolution of Sex*.

**Alienist and Neurologist*, 1891.

‡Rolph: *Biologische Problem*, 1884.

††Geddes-Thompson: *Evolution of Sex*.

***Biologische Problem*.

tions and its own needs. These, during biologic evolution, being associated have so become modified that higher functions are more practicable than by the single cell or agglomerations.* They have thus obeyed that law of evolution whereby all things proceed from the simple coherent undifferentiated homogeneity to the complex coherent differentiated heterogeneity with a loss of explosive force.† That the organism may perform its functions regularly and systematically the component parts must surrender certain functions for the benefit of the organism as a whole. The red blood cell and other cells surrender their reproductive powers, otherwise pernicious anemia and its ally cancer result. These surrenders occur under a complex system of checks and balances which accomplishes the greatest possible result with least practicable expenditure of force. The single cell otherwise executes the work of decomposition and integration without reference to its outside relations. If one cell be less nourished than another, it cannot hold its ground against the latter; such a cell like the ameba has merely potentialities. The differentiated cell group or organ has wider consciousness whose seat is in its ganglia. Its function is more complex, no longer operating chiefly for its own benefit, but for that of the organism. The forebrain is the culmination of all the checks and balances of the organism. To it come all reports from the interior as well as the exterior in the midst of all complications; it has to exercise foresight and to take into consideration not only the immediate effect of an act, but also the more remote consequences for the commonwealth. When a question of the "ego" occurs it is not subordinated to the little toe or the rectum, but all is to the cerebral cortex, to which belongs the duty of directing the individual and of prescribing its law. It is consciousness itself. But how does consciousness form its judgments and its decisions? It forms them from representations awakened in it by excitations proceeding from the internal organs and from the senses. If consciousness allow itself to be directed solely by the organic excitation that seeks to gratify its momentary appetites on the spot, at

*Roux: *Kampf der Theile im Organismus*, Leipzig, Germany, 1881.

†Herbert Spencer: *Principles of Biology*.

the cost of well-being, it injures an organ by favoring the need of another, and it neglects to take into consideration circumstances of the external world which must be dealt with in the interest of the whole organism.

A man is swimming under water—his cells know nothing of it, and do not trouble themselves about it. They quietly absorb from the blood the oxygen which they need at the moment and set free in exchange carbon dioxid. The decomposed blood excites the medulla oblongata and the latter impetuously demands a movement of inspiration. Were the gray cerebral cortex to yield to a seemingly justifiable local demand of an organ, and allow an impulse to inspire to proceed to the muscles concerned, the lungs would fill with water and death of the entire organism result. Hence, consciousness does not obey the demand of the medulla oblongata, and instead of sending motor impulses to the intercostal muscles and those of the diaphragm, communicates them to the muscles of arms and legs, so instead of breathing under water the swimmer emerges at the surface. The typhoid convalescent feels a raging hunger. Were he to yield to this desire momentary satisfaction would result, but he would risk perforation of the intestines. His consciousness resists the desire of his organs for the benefit of the whole organism.

The cases are of course generally much more complex, but it is always the task of consciousness to test the stimuli which it receives from the depths of the organs, to comprise in the motor images, which they excite all its earlier experiences, its knowledge, directions by the external world and to disregard the stimuli of judgments opposed to them are more powerful than they. Even a perfectly healthy organism quickly goes to wrack and ruin if the inhibitive activity of consciousness is not exercised and if, through this want of exercise, its inhibitive strength becomes atrophied. If, however, the organism be not perfectly healthy, if it be degenerate, its ruin is much more speedy and certain when it obeys the urging of the organs. In such a case these organs suffer from either excessive or deficient use. Their exact satisfaction not only pernicious in remote consequences to

the organism but primarily to the organs themselves, or vice versa.

All organisms are developed cells and groups of cells. Compound organism cells retain the potentialities of single-celled organisms, which they surrender for the benefit of the whole organism. These potentialities are lighted into being by disease or disorder of the associating mechanisms constituting the checks on local action for the benefit of the cell commune or body. Cells having resumed low embryonic types for the benefit of the body retain the potentialities of the higher embryonic, which circumstances may stimulate either for the benefit of body or of the cell itself.*

Potentiality of advance or retrogressive development ere systemic symmetric balance obtains is always present. The first is particularly true of the sexual system. Toward the end of the fourth month of pregnancy sexual indifference in the fetus comes to an end. Henceforth evolution of the genitals is particularly active as Jacquet and Rondeau† have shown. The ovaries and semiferous ducts are formed. The uterus hypertrophies and its mucous membrane shows the usual menstrual alterations. Some girls menstruate soon after birth. The galactiferous ducts swell and their epithelium desquamates. The prostate increases in size. The testicles swell and hydrocele comparable to that of the adult is sometimes found at birth. A crisis occurs at this intra-uterine period similar to that of puberty. Milk secretion according to Renouf‡ may occur. The increase of the prostate is attended by liquid secretion. At the end of three months after birth these phenomena cease.

(To be continued.)

*Talbot: Developmental Pathology.

†Presse Medicale, March, 1905.

‡Arch. de Med. des Enfants, June, 1906.

JURY SANITATION, PSYCHICAL AND PHYSICAL, AND RIGHT VERDICTS.

By C. H. HUGHES, M. D.

St. Louis.

SOME years ago Secretary Taft said before the Yale Law School that the administration of criminal law in the American states was, with a few exceptions, a disgrace to American civilization.

Some of this is largely due to the unsanitary care, psychical and physical, of the juror for the mind is very much the reflex of its environment as well as to defective statutes and court rules of procedure. Adequate or deficient oxydation of the psychic neurones has much more to do with soundness or unsoundness of judgment, than is estimated by the law or the ministers thereof. The verdict or disagreement of jurors, compelled to sit all night in close, illy-ventilated rooms and deliberate, if it may be called deliberation, under such semi-somnolent brain unstabling circumstances, is not apt to be delivered exactly to the line of "truth, the whole truth and nothing but the truth" and the judgment of members of a tired jury, some saturated and disturbed in judgment and feeling with the toxic effect of alcoholic stimulation, taken by some jurors as a panacea for "that tired feeling," is not likely to be a conclusion beyond a reasonable doubt after the juryman's tired brain shall have been rehabilitated with a healthier, better oxygenated and nourished blood coursing to the psychic neurones to steady and clear the gray cortex of the encephalon.

The beginning of reform in much needed brain and mind conserving practice with reference to the sanitary needs and rights of jurors was lately inaugurated in the Haywood trial at Boise, Idaho. In that remarkable trial the jury was

allowed much freedom. Presiding Judge Wood ordered that the Sheriff permit the jury to go out in the country in street cars. The jury house in this trial was a pleasant place, with rose-covered porches and green lawns, and the jurymen received visits from their families in the presence of bailiffs. They read the daily papers, which came to them divested of all references to the Haywood trial.

To confine juries to an irksome semi-imprisonment, divest their brains of the bouyant influences of healthy environment, repress psychic vitality by a vitiated atmosphere and unaccustomed environing sanitary influences, and repress the normal cerebation of daily habit and expect always equable, just, deliberate and logical discussion among them in the jury room or just and fair and logical verdicts is often expecting too much.

Some jury verdicts were as wisely delivered if emanating from the ward of an insane asylum or at the conclusion of one or more successive all night wrangling when a political platform is enunciated or a peoples' party candidate is nominated. The outcome, if rational, is the conclusion of some one or a few level heads whose decision was made and enforced on the rest in semi-hypnotic fashion while the level conspiring or predetermining heads were clear and free from the psychical stifling and physically depressing and disturbing influences of the jury box or convention hall.

More attention to mental, physical, and chemical conditions of sound psychic states of brain is demanded by what we already know of the dependence of national mind or healthy brain states.

The unstable neurone gets on juries in numbers enough under fairly healthy conditions, as it does in political parties. Hence the *Alienist and Neurologist* deems it timely at this juncture, to make note of the mental sanitary needs and rights of the American jurymen and incidentally also of the rights of all in the premises—the arraigned and the people.

A sound minded, properly sustained jury, is like a well-regulated militia and rigidly enforced law "essential to the security of a free people" and this is especially true of murder

trials where the question of insanity or sanity is involved. And what is true of juries is also true as to the capacity, qualification and mental tone of experts when life or freedom rest on the hazard of medical expert opinion.



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EDITORIAL.

[All Unsigned Editorials are written by the Editor.]

THE SILLY AND OFTEN selfishly and jealously inspired misinterpretation or misquotation of the code of ethics by small calibered medical men who can neither speak nor write with scientific accuracy or correct syntax or forcefulness of diction who say that doctors should neither be seen nor heard of even on matters medical, save at the bedside and in the narrow circle of the family physician, are responsible for much of the meagre esteem in which, in some quarters, medical opinion and medical men are held.

We have let the quacks enlighten the public in their interested and not always honest way, whereas that duty devolves upon us as the code enjoins us to do on all proper occasions. We are doing better now than formerly, especially in regard to hygiene.

For this reason up-to-date medical men have asked but failed to get a National Department of Public Health and a

physician to represent the medical interests and look after the sanitary welfare of the country. The belittling of medical men exists too in regard to the navy. There they do not get their just due in rank and pay and official respect.

THE WATER SUPPLY OF ST. LOUIS COUNTY, ITS EVILS AND DANGERS.—The water supply of St. Louis County as at present supplied is only the beginning of trouble. The time to remedy the trouble is now by public ownership. Condemn it according to law and put it in the hands of the taxpayers for pure and cheap water and plenty of it.

The people are entitled to pure water and pure air at the hands of their servants, the authorities of the county. This is the ground upon which health boards should examine water and nuisances and condemn them if they hurt or endanger health. On this ground county courts should control the water and light supply of the people.

Public servants like county courts, county clerks, sheriffs and the like, should also interest themselves in public ownership of public utilities like tramways, gas, electric light and water. Public officials should seek to be of service to their employees and masters just as good employees in business firms aim to serve those who employ them.

SOME YEARS AGO while the State Health Board of a neighboring State was looking after the irregularities or deficiency of the regulars in medicine, the following advertisement appeared repeatedly in a newspaper of that State.

"Professor Miss Katie Bender can heal all sorts of diseases; can cure blindness, fits and deafness.

"Residence, 14 miles east of Independence, on the road from Independence to Osage, Mo., one and one-half miles southeast of Morehead Station."

As time passed on it was found that this accomplished(?) lady mind healer, her father, mother and brother were engaged in the most hideous and brutal murder business, even to burying the victims alive. Nine of their victims were found buried on their palce, six of whom were identified. This was the notorious Bender family of the Osage Reserva-

lion in Kansas, who transcended in murderous crime the lately detected Mrs. Gunness.

The Hospital ON EPILEPSY.—The absence of any anatomical lesion underlying the condition of epilepsy has led to the view that this affection is the result of an autointoxication. This hypothesis receives confirmation in the facts that injections of various substances may give rise to convulsions and that convulsions occur in certain diseases of the excretory organs, especially of the kidneys. Voisin and Péron have shown that the urine of epileptics is hypotoxic before an attack and becomes hypertoxic after. Krainsky injected the blood of an epileptic during an attack into a dog, with the result that the animal developed convulsions to which it eventually succumbed. He believed that the toxicity of the blood consisted in excess of ammonia salts, due to a partial failure of the carbonate of ammonium to be transformed into urea. More recently Rosanoff has examined the question more closely, and following the same lines has analyzed the urine of epileptics before and after the convulsive attacks. He finds that whereas in ordinary individuals the proportion of urinary ammonia to the total nitrogen content only varies at most to the extent of 0.013, epileptics show a variation amounting sometimes to 0.05. He examined altogether the urine of seven epileptics and found that with them all this proportion of ammonia to total nitrogen increased after an attack and only then. He concludes, therefore, that epilepsy is due to a peculiar disorder in the nitrogen metabolism. The prime cause and seat of such a disorder in the normal metabolic processes of the body remains still a mystery.

PSYCHOLOGY IN SCHOOLS.—*The Training School* for July makes the following comment: In speaking of the public schools in Vienna, Dr. Goddard, in his article in this issue, says that everyone feels that something ought to be done for the special children, but no one knows what and suggests that a trained psychologist would be of much assistance to them there. This condition of not knowing what to do is not by any means confined to Austria. In our own

country there are a great many school superintendents who are much at sea as to what to do with these special children, and their medical inspectors know but little more. A good psycho-physiologist is a crying need in every public school system in the country.

NEEDLESS CITY NOISES.—*The Chironian* says: It would seem that both our health and police departments could find no better subject to investigate than such noises as are legally subject to restriction and the earnest study of this whole question of noises as a public nuisance, not forgetting the melodious concertos played by flat car wheels bumping over jagged tracks.

This is a timely protest against the nerve-racking nuisances of needless city noises. The noisy newsboys howling in procession through the streetcars, when the papers under his arm speak louder to the mind of the reader than his yelling, the steam whistles vying with each other in calls to begin and cease labor, when every workman carries a Waltham and Elgin or an Ingersoll, and knows well enough when it is time to begin or quit work.

DR. U. O. B. WINGATE announces his removal and association as Medical Director with the Peerless Springs Hotel and Sanatorium at Fox Lake, Wisconsin.

AUGUST 18, 1908, FOUNDER'S DAY, established by the Officers of Neuronhurst, the Indianapolis Sanatorium in commemoration of the life and work of Dr. William Baldwin Fletcher, born August 18, 1837, died April 25, 1907, was an important event in the history of one of our most worthy Western and Central sanatoriums and commemorated the life work of a most worthy man in medicine and in the special work.

PSYCHOTHERAPY has had such a "yellow streak" in it that many medical men have refrained from utilizing to the full the good in it. This is one reason why it is desirable that conservative, scientifically trained men should work with it and let us know their experience concerning its advantages on the one hand and its limitations and dangers on the other.

Its use should be preceded in every case by the making of an accurate diagnosis by our best methods. It is no cure-all, but in certain cases it is indispensable, and with all patients it is a valuable supplement to other forms of therapy.—*Baker, of Baltimore, Jl. A. M. A. MacDonald, Indianapolis, Abstracts.*

OLIVER WENDELL HOLMES ON INSANITY.—The *Leucocyte* says Dr. Holmes spoke thus of insanity in certain brains. "Insanity is often the logic of an accurate mind overtaken. Good mental machinery ought to break its own wheels and levers if anything is thrust among them suddenly which tends to stop them or reverse their motion. A weak mind does not accumulate force enough to hurt itself; stupidity often saves a man from going mad. We frequently see persons in insane hospitals sent there in consequence of what are called religious mental disturbances. I confess that I think better of them than of many who hold the same notions and keep their wits and enjoy life very well outside of the asylums. Any decent person ought to go mad if he really holds such and such opinions. Anything that is brutal, cruel, heathenish, that makes life hopeless for the most of mankind and perhaps for entire races—anything that assumes the necessity for the extermination of instincts which were given to be regulated—no matter by what name you call it—no matter whether a fakir or a monk or a deacon believes it—if received, ought to produce insanity in every well-regulated mind."

PARANOID HYPNOTIC DELUSIONS IN UNSTABLE "CHRISTIAN SCIENTISTS" are a natural outcome of the "malicious mesmerism" cult of "Mother Eddy." This "malicious mesmerism" will, the "Mother" claims, cause a kind of parthenogenesis. The mere look of a male "malicious mesmerist," is sufficient to impregnate a virgin, even though she be a "Christian Scientist." Persecutory delusions of this type may be expected to crop up among the many female instabilities which crowd the "Christian Science" churches. One striking instance has lately been reported from New York. Miss Flora Draper, reader in the First Christian church of Christ Scientist at Ninety-sixth street and Central Park West, the second biggest church of the denomination in the country, was picked up at Fifty-seventh street and Eighth avenue

one afternoon by Policeman Gaffney and taken to the West Forty-seventh street station. She told the policeman that some one was trying to hypnotize her. Gaffney thought the woman was acting in an unusual manner, so did the desk lieutenant, who called an ambulance from Roosevelt hospital. Surgeon Ward had her removed to the psychopathic ward in Bellevue for observation."

On the hospital slip Miss Draper was put down as suffering from paranoia. She gives her address as San Remo, Broadway and Central Park West. Neither her occupation nor the name of her next friend appears on the slip. Miss Draper is an intimate friend of Mrs. Stetson, leader of the Christian Scientist movement in New York.—K.

A SOUND PSYCHOLOGY FOR THE PUBLIC PRESS AND POPULAR WRITERS.—Magazines, newspapers, theatres, poetry and fiction constitute the adult and post-graduate high and public schools of the people and even the night and Sunday-schools of the people at large. Assuch they should be level-headed, right-minded and right-hearted teachers of sound philosophy and precept for speech and conduct of the popular mind and heart. With them pseudoxy, pseudology, pseudography should always be against the ethics of proper journalism of correct honorable authorship. Innocent or false faces put on vice, criminal conduct humorously pictured, virtue flippantly characterized, folly patronized, disrespectful, harmful or criminal mischief pictorially portrayed, as in the "Buster Brown," "Foxy Grandpa" and "Old Soldier" series in which someone is always seriously harmed or hurt for sport, is next akin to approvingly portraying the torture of animals or the often deadly hazing by college psychopaths. Something is ordinarily lacking in the mental makeup of the human being who concieves mischief that has mental or physical torture as its object.

This is a kind of cruelly mischievous propensity regardless of painful consequences to the plagued one, which is not far removed from that indifference out of which murderers may evolve. It is psychically wrong to foster this for there are those so unstably endowed in this regard, like unto the

hysteropath, the oinopath, etc., who should not be encouraged by public press, book or periodical, word or picture to evolve into those destructive harmful extremes to which they are prone. We endorse the *Boston Herald*.

This restraint admonition applies to certain billboard displays, to dime novel blood and thunder adventure, harrowing accounts of crime, etc., as well as to vice which is a monster, etc., wherein familiarity breeds not contempt always, but often propensity to imitate and surpass. Obscene pictures, letters and literature are excluded from the mails, why not other demoralizing matter and why should not more attention be paid to a higher plane press as to its moral influence to develop and maintain a higher ethical standard concerning the mind tainting evil of murderous mischief and cultivate a normal and healthy psychology, by precept and example for the people? The retrogression of the race and its causes should be familiar themes of thought and warning with the daily press in our magazines and from our forums. Too many citizens are going at a too rapid rate of moral and physical degeneracy to destruction, but not rapidly enough to save defective entailment on the yet unborn.

A MISTAKE ABOUT OUR ITALIAN COLLEAGUES.—Dr. Levy, writing from Paris, truly says as follows:

American medical students when considering the question of foreign study rarely think beyond London, Berlin, Vienna or other English and German centers of learning. Occasionally Paris enters into their plans. Italy receives no consideration as a rule; nor does the average American physician keep abreast of Italian medicine and surgery as he does of other countries. This is indeed a pity, for one may find much of value here. . . . In general our estimate of Italians is belittled by the fact that only rarely do we come in contact with the educated or cultured of this country. It is a revelation to see and associate with residents of Italy at home. The culture and refinement they possess represent the highest attainments of modern civilization grafted upon centuries of inherited civilization. One needs but to recall the beauties of ancient Rome with its

high class of art and letters to understand that modern achievements must certainly be influenced thereby in the same people.

The Italian contributions, we may add, to psychiatric, neuriatric, neurophysiologic, neuro-anatomic and neuro-pathologic advance and research are not surpassed by any nation.

THE DEATH OF DR. HENRY A. TOBEY of the Hospital for the Insane at Toledo, Ohio, at the age of fifty-eight, drops from the ranks of clinical psychiatry one of its most devoted, efficient and enthusiastic workers. He will be missed among the medical men of mark in his section of the country and in his sphere of usefulness and especially in the "Western Reserve" States.

THE HAT GRABBERS AND FLOUR THROWERS DEMI FOUS. —When there is a storm out at sea the ocean shows it on its shores, so when there has been an ancestral psychic storm in the family the instability often shows itself in the foolish conduct of the college hazer and in various walks of life, as in the flour throwers and hat grabbers "on change" at certain times.

If these unstable gentlemen would restrain their erratic propensities when the first impulse to act the fool comes upon them, they would stand a better chance of escaping the lunatic asylum as their final destiny.

A word to the wise is sufficient, but fools seldom give attention to timely advice for their welfare.

ALIENISTS FOR PENAL ESTABLISHMENTS would certainly be in line with the advanced suggestions of modern psychopathology. Too many insane, condemned as criminals, go to the gallows or the electric chair.

A man condemned at Alexandria, Louisiana, lately, in hearing his death warrant read to him for a murder in October, 1908, immediately ran amuck in the Parish Jail and killed or wounded nearly every other prisoner before being subdued by a stream of cold water thrown on him by the deputies in charge.

Two of the victims are dead, three are dying and a fourth is badly injured. An old case knife, sharpened by one of the prisoners for shaving, was the weapon used by the insane man.

Two of his victims were insane negroes. He, too, is a negro.

The insane, especially in alcoholic or epileptic automatism, after committing murder, often say they do not remember doing the deed. Here an expert, experienced alienist would suspect the possibility of and inquire closely for, proof or disproof.

THERAPEUTIC NOTES for September presents on its front cover page an excellent likeness of that splendid medical editor whose "like we ne'er shall see again," Dr. Geo. F. Shrady.

He was as handsome and attractive of face as he was good and capable of mind in medical literary lore.

But this is only one of the attractive features to the physician of *Therapeutic Notes* No. 5, 1908.

IT IS A HYGIENIC ERROR in this age of antiseptic quiver to discharge hospital charity patients clad in the habilaments of lately deceased patients.

It is a crime against popular health to sell such garments undisinfected to old clothes men or to pawn them or receive them in pawn except under sanitary surveillance.

The microscopists and sanitarians have been sending out warnings without number on the subject of tuberculosis, syphilis and other infections for these many years and the people have not yet hearkened as they should.

And now Asiatic cholera is not far off as travel goes these days and the germ of the bubonic plague is yet on our western borders.

The food we eat, the fluids we drink, the air we breathe, the clothes we wear and even the books and pencils our children use at school, should be subjects of sanitary concern. As much so as to the latter as the words they speak, the things they learn and the thoughts they think.

The sanitation of the mind is important and that of the body and brain that sustain and maintain it also.

It is high time that the world made a business of sanitation to the fullest extent of present day medical enlightenment and that it should get in advance step with the medical profession on the subject. To this end the United States should have a department of sanitation with a medical representative in the President's cabinet as the *Alienist and Neurologist* has "many a time and oft" advised.

WEAK BUT WISE from a race conservation sanitary standpoint was the bankers young inebriate son who suicided to save his affiance from having a drunken husband and the world from appetite degenerate progeny. This is possibly commendable racial suicide and the world should not lament such.

The young man claimed inebriate inheritance, though his toxically maudlin brain may have wrongly estimated facts and circumstances.

Hopeless inebriates are wise to wish to avert the breeding of their weak and vicious kind. It would be well if sober communities felt the same.

EROTOPATHIC DEATH PACTS are becoming all too common in American life for the sane security of society and the hoped for stability of that normal brain tone necessary for the continuing security of a free people.

Our institutions were founded by a steady brained, level-headed, psychically potent people. Yet it were better from the view of a sound psychology and true patriotism that these double and sometimes triple death pacts should be certainly and surely executed than that such abnormals should continue to live and propagate more of their unstable erotopathic kind, Mr. Roosevelt to the contrary notwithstanding, unless he excepts these. Only the stably brained should continue their kind.

MATING WITH PSYCHOPATHS outside of insane asylums and among those who do not know better is unfortunate for humanity, but for an insane hospital physician to marry a

patient therein unless his settled intention is to have no issue is censurable as unwise and a cruelty to the possible progeny of so unscientific a union. It is a crime against the yet unborn, considering the immeasurable influence of heredity on future generations, as Dr. Eugene Cohn in a paper before us on "hereditary predispositions" in line with all the best observers in psychiatry, maintains. And this even though love may restore clouded mentality as the author of *Iturbide* maintains concerning his "wee little" inamorata with her "wealth of wavy silken hair, passionate eyes, red and voluptuous lips," etc., of the Athens Ohio Asylum—"Sparkling eyes" do not establish sanity, nor does the "vacant and expressionless stare" as Doctor McLeish diagnosticates "belong to ninety-nine cases out of a hundred," but only to idiocy and dementia or fatuity as level-headed alienists understand the subject of insanity in its various phases.

A SOMNAMBULIST'S ELECTION DREAM caused him to walk from his bed through a window, under the impression that Mr. Bryan was the presidential victor, and fall between thirty and forty feet. The fall having been broken by an intervening canvas top of a truck wagon, from which he bounded to the sidewalk, he was still asleep and dreaming when the police officer who had seen the involuntary vault went to him—and he resisted the latter's "rude awaking." When fully aroused and realizing his situation, he stated that he dreamed he was in a Bryan election celebration marching to victorious music, probably to the usual "see the conquering hero comes."

Somnambulists sleep soundly, but do not always sleep safely or accurately in their dreams and extremely violent jolts are sometimes necessary to awake them. This story is, therefore, not improbable, though it does come through the sometime imaginative channel of a newspaper reporter and the associated press reports.

It might here be remarked that a good many men have of late been thinking and guessing too violently and inaccurately as if in somnambulistic dreams and like the somnambulist have dreamed the wrong dreams.

THE ORDER OF THE SUN AND LION was lately conferred on Mr. Frank Ruf by the Shah of Persia. The order ranks with the Legion of Honor of France, the Order of St. Stanislaus of Russia and the Order of the Bath of England. Mr. Ruf is an enthusiastic collector of Persian antiquities and is gathering material for a book about Persia.

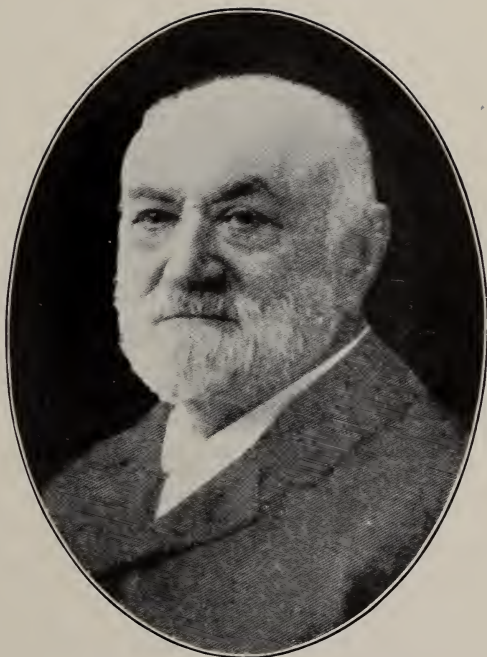
Mr. Ruf is well known to the profession, including the readers of the *Alienist and Neurologist*, as the proprietor of Antikamnia. Mr. Ruf and Ex-Governor Francis of World's Fair fame are the only two St. Louisans who have had this Persian honor bestowed upon them.

A MUSICAL MELANCHOLIAC NEGRO SUICIDE of Belleville, Illinois, October 18th, out of work, was playing on the piano, "every day'll be Sunday bye an' bye," when he fell from the stool dead, from poison.

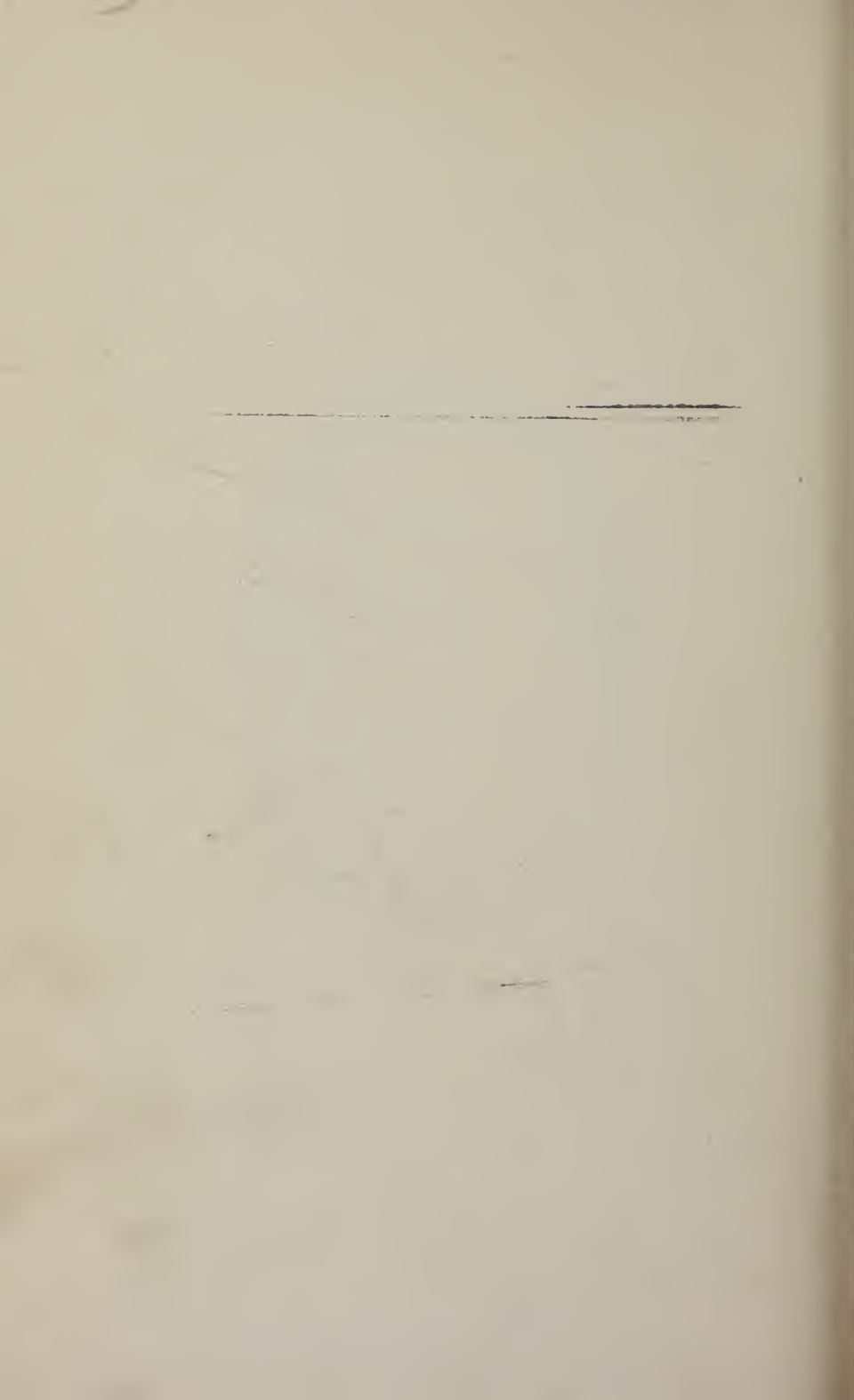
ALBERT T. PATRICK, the New York lawyer who is now serving a life sentence in Sing Sing Prison on the sentence of murdering the Texas millionaire Rice, charges against the management of Sing Sing Prison that he is suffering from a complication of diseases, that he cannot obtain efficient and sympathetic medical treatment, that the prison is conducted "with the intent and the effect of injuring the prisoners mentally, morally and physically, generally to their utter ruin, under color of arbitrary and unworkable rules, enforced at discretion, whereby the prison authorities hold an arbitrary and irresponsible control over the prisoners, exercised with arrogance, contempt and malignity."

THE VENERABLE, GENIAL, FRIENDLY, FORCEFUL FACE of Dr. Enno Sander, the Pa of the "Garrod Spa" decorates a page of the *Alienist and Neurologist* to-day.

Though venerable in years, having passed his eighty-sixth, he is yet young in action almost and when "first we were acquaint" away back in the early sixties when chemistry and pharmacy engrossed his daily care and the splendid and popular pharmacy under the old Barnum's Hotel on Main and Walnut St., was the resort of the military men who put



DR. ENNO SANDER



up at the historic hostelry. We knew Dr. Sander in our earlier life mornings of military service when only a single bar decorated our shoulders, when Sander was to us a prodigy of pharmaco-chemical knowledge and an inspiration of later scientific endeavor.

We now salute him after his morning's hope has received its fruition and his noontide labors are over as the honored honorary member of the Academy of Science which he has served so long, so faithfully and so well, in the glorious sunset of a life well spent, with the hope that he may be many years with us as he is now without the infirmities of the weight of years from which we are happy to note our friend's exemption.

While the world drinks to its own health in Garrod Spa the good name of Enno Sander shall not be forgotten.

Dr. Sander was born at Trinum, near Koethen in Anhalt, Germany, Feb. 27, 1822, son of Karl Friedrich and Emilia (Palm) Sander. He attended the gymnasia of Zerbst, Eisleben and Koethen, the University of Berlin, and was graduated at Halle in 1847. He received the golden diploma from his alma mater in 1897. In 1848 he was a member of the constitutional assembly of his native state, and in 1849 was assistant secretary of war in Baden. He was taken prisoner and sentenced to ten years of solitary confinement for his connection with the Badish revolution; but in 1850 was pardoned and exiled. Coming to the United States, he served during the civil war as major and brigade quartermaster on the staff of Gen. John B. Gray, in St. Louis, Mo., to whom the editor hereof was assigned as a surgeon-in-chief.

GRANT THE CONQUERER OF ALCOHOLISM. PRESIDENT-ELECT TAFT AND EX-PRESIDENT GRANT'S CONQUERED DIPLOPHILIA.—Mr. Taft has been severely criticised by the unkind, thoughtless and biased for the greatest tribute ever paid to a hero and a conqueror, but he is and has been justly commended for that reference. Only alienists and the victims of alcohol's tyrannous grip on the appetite and the brain cells know how valiant and determined was the fight of the great General and ex-President in his younger days against that

strong enemy which men in weak unenlightened moments let in at their mouths to steal away their brains, and comparatively few men once overcome, turn such defeat into victory as did the hero of Vicksburg and Appomattox. He fought out the fight to a glorious finish in his favor on the same lines of bulldog tenacity that won his conquering way through the enemy's lines, though it took all summer.

Grant conquered dipsomania. No wonder that he conquered all other enemies.

All other of life's many obstacles are conquerable to the man who can overcome oinophilia as it once for a while, dominated General Grant in his early life in St. Louis.

No higher tribute could have been paid than that of Taft's to this great conqueror of self.

DIVISION OF THE AUDITORY NERVE FOR PAINFUL TINNITUS.—C. A. Ballance reports one case and illustrates it with an excellent picture showing the relations of the various structures located in the field of operation. He says that he is not aware that anyone has previously employed his special technique in dividing the auditory nerve. Details of the operation are thus given: The dura was opened and the cerebellar hemisphere displaced backwards and inwards by marine sponge pressure. On removing the sponges the cerebellum remained in the retracted position, so that the fifth, seventh, eighth, ninth, tenth, eleventh, and twelfth nerves were exposed to view. The eighth nerve was depressed so as to enable me to see clearly the rounded cord of the facial nerve and to avoid injuring it when dividing the auditory nerve. Then the division of the auditory nerve was easily accomplished. No attempt was made to separate the nerve of Wrisberg from the auditory nerve; indeed, the operator did not see it, no doubt because it was concealed by the arachnoid sheath. There was slight hemorrhage from the auditory artery. On recovery from the anesthetic there was conjugate deviation of the eyes to the left, and the eyes could not be moved towards the right. In about forty-eight hours this movement was again possible, but was feeble and was attended by lateral nystagmus with wide excursions. Convalescence was very

slow, the pulse remained at 100°, or over, for some weeks, and there was a little difficulty in swallowing due to paresis of the right side of the palate and of the right side of the pharynx. There were occasional syncopal attacks and also paroxysmal feelings of impending suffocation by which the patient was sometimes awakened at night. There was absolute deafness of the right ear. A pre-existing palsy was not increased. Two months later there was still slight paresis affecting the right side of the palate and pharynx. Nystagmus was still present. Respirations were 22 and feeble, pulse 100° and regular. Heart was normal, anesthesia and ataxia absent. In two months more the scalp flap was concave and the painful tinnitus had ceased. There was still some weakness on the right side of the face. The tongue deviated very slightly to the left when protruded. There was nystagmus when looking to the right, but less than formerly, and only slight jerks on looking to the left. The palate, pharynx, and vocal cords moved normally, and there was no longer any difficulty in breathing or in swallowing. The sense of taste was lost along the right side of the tongue. There was an area of deficient sensation (as tested with a camel's hair brush) of about the size of a split pea at the junction of the middle of the posterior border of the right external meatus with the concha. There was no affection of any other cranial nerve. The knee and ankle-jerks were greater on the right than on the left side. The supinator jerks were equal. The pulse was 60. There were no indications of gross disease and no apparent reason why the patient should not get quite well.

THE RED BLOOD COUNT, VITAL CAPACITY AND THE "VIS MEDICATRIX".—"The growing importance of our knowledge in reference to the value of the blood count" in estimating vital capacity and the consequent *vis medicatrix naturae* is noted by the *Medical Progress* and the researches of the Boston crowd as they have been comprehensively termed have been reproduced from the *Medical Examiner and Practitioner* with approbation in which the *Alienist and Neurologist* concurs. Hematology advances to the aid of prognosis as well as diagnosis in clinical neurology and psychiatry as well as in the so-

called blood diseases so often the result of faulty nerve center states and metabolism and vice versa with rapid and effective steps. But the precise value of the white cell count is not yet so definitely determined. Psychiatry and neuriatry are yet looking on in anticipation of further "bloody revelations."

Here is the *Medical Examiner's* statement:

"The greater the number and the more nearly uniform the size, and the greater the relative number of the large red blood bodies as compared to the number of the smaller groups of less diamitent reds, the greater is the ability of the organism to resist all forms of injury." This statement permits no discussion in respect to the detail and requires none, for it rests upon an incontestable group of facts. 1. That the group of blood bodies of the most importance to life is the group of nearly uniform large reds. 2. The numerous group of small reds, or smaller reds are clearly of other function than the larger reds, and while both are apparently oxygen carriers generically they are specifically different. 3. It has been proven by long experience that a preponderance of small reds may accompany a much depressed vitality. The generalized statement that the ability to resist injury depends upon the large reds and upon the large reds only as the agent by which the living elements in the corpus vivium are vitalized is incontestable. Beyond this, we may not be justified in forming opinions. To this point we are fully justified in pressing our opinions.

We may, then, make the following thesis and regard it as a thesis proven true by experience. As between humans of the same weight, height, chest girth, having organs substantially sound a distinction as to ability to resist injuries by assault of the organism, so-called injuries at large being bruises, fractured bones, acute diseases and specifically infectious diseases may be made by considering the relative number and average size of the red blood bodies in the discussed human organisms.

Suppose we assume 4,500,000 as the latest number of red cells per unit in two blood samples. In A assume the cells to have the maximum average size, regardless of special distinction; in B the minimum average size, equally regardless

of all special distinctions, is it not perfectly obvious that the vital capacity of A must greatly exceed the vital capacity of B?

The amount of oxygen carried by a given bulk of blood is dependent directly upon the red corpuscle index. This is surprisingly greater in a given number of the corpuscles of maximum size when compared with the same of the minimum size. In two bodies of practically identical conditions as to weight and the like and doing the same work the oxygen demand is also practically identical. If then the amount of blood carried per heart revolution is the same in both the number of heart beats to transfer a given weight of oxygen to obtain the same vitalization of the organism must be correspondingly larger in B than in A. But more heart beats stand for more heart work and less heart rest, for inferior nutrition of the heart's substance, hence for increased liability to injury and exhaustion.

It also stands for a more rapid current in the vessels, over valve edges with correspondingly increased friction and liability to injuries of all sorts. The smaller arteries specially are put to strain, i. e., just where the system is the weakest.

Putting the problem in reverse order it may be posed as follows: "Since the amount of oxygen transferred passed any point in a given vascular system is a direct product of the size of the corpuscles passing that point by their number, to transfer any definite amount of oxygen, say 10,000,000 units, by corpuscles of standard size requires less corpuscles numerically than if the corpuscles are ninety-four hundredths of the said standard size and since the oxygen demand is practically invariable, weight for weight, the blood current must be correspondingly more rapid."

The statements posed here, says *Medical Progress*, are not speculative opinions, but facts determined by men whose reputations are the very foundation of medical science teachings, they may, therefore, be looked upon as facts and conclusions may be developed from them according to the laws of logic, and to such conclusions we in turn must give due weight.

RIGHTS OF THE SANE.—The New York *Medical Record* talks like an alienist in the following:

Insanity has certainly increased in America and in Great Britain *pari passu* with the congregation of great masses in the towns, living at high pressure in regard to business and amusement. The future generation of civilized beings tends fair to be more prone to mental disorders than the preceding, as its members will have inherited various nervous traits in an exaggerated form. A writer of some note predicted a short time ago that if affairs progressed at the rate they had been progressing recently, the insane in England would outnumber the sane, and Lord Roseberry but a few weeks ago pleaded that the insane should not be permitted to be an affliction and a danger to the sane.

There are said to be many in Great Britain who act on the principle that the world is made for the inefficient, the sickly, the foolish, and the mad, and that taxpayers and workers should be considered only after the interests of semi-lunatics and the unfit have been attended to. Matters may not be so bad as this, but it is obvious that affections of the nervous system and madness have developed to an alarming degree within recent years. How often does one hear that a prominent business or public man has broken down and has to be recuperated by the rest cure or the primitive life cure, or some similar method?

Our courts of law are not infrequently employed in trying the cases of rich degenerates who have broken the laws of the country, and who in a less sentimental age would have been given but short shrift, but to whom now is extended pity unbounded; and, as a rule, they get off scot free. To observe the audiences also when such a case is being tried is sufficient proof that degeneracy is prevalent. Indeed, there is no need whatever to heap up facts to show that mental instability is a feature of the times, the magnificent buildings for the reception of the insane in New York State alone would be proof enough.

Given, then, that insanity is prevalent and that nervous complaints of every description are more than prevalent, is it true that in America, as well as in Europe, too much considera-

tion is paid to the unfit, and that the sane have to suffer for the insane? No one would argue that we ought to revert to the custom of times long past, when the doctrine of the survival of the fittest was in practical application, but it is, at any rate, a matter open to doubt if we are not coddling the useless too much nowadays. It is quite right that the sick and helpless should be aided, but there is a limit to such assistance, and it is by no means certain that we are not going too far in the other direction. The strong and self-reliant are those who will win in the long run, and to teach the masses to be slack and placid is to court disaster.—*Medical Record*.

A STATE BOARD'S CRIME AGAINST A REPUTABLE MEDICAL SCHOOL.—The State Board of Health of Missouri assuming prerogatives no State Board ought to assume against any chartered Medical College established its minimum requirement as to laboratory equipment and including the ridiculous and impossible demand that each student should personally attend five labor cases, etc. etc.,—and refused to even permit the graduates of a certain St. Louis College to even come before it for examination, publishing their action promptly in the daily press. Those graduates have not yet been examined though the Court months ago, under mandamus proceedings, ordered this Board to do so without delay. This Board instead of a prompt compliance with the Courts' order defers examining the twenty-seven mandamus graduates on pretext of going to a higher court thus tyrannically keeping these worthy graduates out of a chance to get their approval and get into lawful practice in this State though the majority of the graduating class the Board has discriminated against have passed the Boards of other states.

The Judge rebuking this Board's tyrannous course recounts that its visit to this college "was made on a date when the faculty was not present, because the school was in vacation, and instead of calling for those in real authority, the Board made a necessarily perfunctory and inadequate examination under the guidance of the janitor, and without having opened to them a single casement or locker in which, confessedly, all the valuable apparatus of the school is safely kept.

Neither did the list of answers by the Board's secretary (Exh. N.) supply such want of opportunity, because the same does not pretend to go into detail as to apparatus actually possessed by the University.

"Upon this so-called examination, this school along with all other medical colleges of the State (barring one) was notified that there was a deficiency of laboratory equipments and of clinical opportunities which must be made up by October 1, 1907. To such notification the Dean of the University, whose character and probity is conceded even by his opponents in this case, replied on September 30, 1907, that improvements had been made and were then being made by them, in the expectation of meeting the requirements of the Board. In October, 1907, several efforts were again made by the Board to examine the laboratories and clinics of the University, but for reasons which rested partly in unwillingness, partly in plain misunderstanding, and not a little in an apparent lack of genuine good will toward the University and those connected with it no meeting was ever accomplished."

The Court continues: "The State Board did not make any examination of the subject matter upon which they were undertgking to pass a most momentous and far-reaching judgment they never inspected these laboratories to ascertain the actual presence or absence of the divers apparatus called for by their 'minimum requirements' and they simply adjudged that because they saw but a part of it from the outside of locked cases, and no one was present at the time who could open these for them, that no such apparatus existed," and this in vacation, the College deserted, no member of the Faculty present and the janitor not knowing that they were official visitors. Such a clandestine visit of so-called examination is itself a condemnation. The Court says further: "This conclusion seems all the more justifiable since the uncontroverted evidence shows, not merely that all the appliances really called for by the 'minimum requirements' were either already owned by the University, or secured on fresh requisitions. Not knowing what parts of the scheduled apparatus the University did, or did not, have there is small wonder that none of the notifications of the State Board ever

particularized or pointed out just what they claimed was lacking, and that they do not even now attempt so to do by their return; but a failure so to point out is another element in arriving at the necessary conclusion that the University did not receive at the hands of the Board that full and fair opportunity which even administrative bodies, in the exercise of a sound and reasonable discretion, must accord.

The Judge concludes, "therefore, that the action of the State Board, based upon no other or different information and investigation than that disclosed by the evidence, and briefly adverted to above, was without authority, and is oppressive and unreasonable in fact, as applied to the graduating class of 1908; and a peremptory writ of mandamus will therefore be awarded, commanding said State Board of Health, and the various members thereof, to accord to the Relators and such of them as shall have complied with all other conditions of the Statute of 1907, an opportunity with all convenient speed to be and appear before said Board, and to undergo the usual examination accorded to other applicants for license to practice medicine and surgery in this State, with costs."

Here is a stab that might have taken the life of a less vitally resisting and firmly established Medical School and the wound inflicted by a Board favored by the laws of the State created through the medical profession to promote, rather than destroy advanced regular medical education.

Better no State Board of Health than one that passes over quackery and assaults and seeks to embarrass regular Medical Schools with faculties and facilities such as the Medical Department of Barnes University possesses and whose seventeen hundred alumni grace communities in near forty states with honor to themselves and their profession. It is pitiable and damnable that such tyranny could be possible in a free state—that such a wrong against the rights of others could be possible by men clothed with a little brief authority and regardless of the right.

"AIN'T NO LATIN FOR 'KNEE-JERK.'"—Webster did not know the origin of jerk. He thought it might have come to us

from the Chaldaic or Hebrew or Saxonherka, but he was not sure. It is told—of course, it is a joke—that at the late meeting of the State Medical Examining Board of Oregon a student who had arrived in Portland but three days before, direct from Europe, was being examined. He had been seven years in practice, had but a limited knowledge of English, although his knowledge of Latin was somewhat more extensive.

There occurred a question in one of the papers which used the term "knee jerk." This student from abroad went to one of the members of the board and informed him that he did not understand what was sought in the term "knee-jerk," which is an English colloquialism. After seeking to secure some other expression for the symptom, the student asked the man in charge that the Latin name of the expression should be given him, and received in reply the statement, "There ain't no Latin for 'knee-jerk.' " Needless to say, this student passed the board, although in some 23 recent graduates from the Oregon schools, three only secured the certificates of the board. The others deemed it prudent to remain away, or, going, were plucked."—*Medical Sentinel*.

What sort of questions does this Board ask that it should reject so many and why does it ignore Lindly Murry so shamefully?

THE INSANE BAVARIAN KING OTTO has developed suicidal impulses, violent fulminations and a delusive dread of rats. He was born in 1848 and first displayed his insanity in 1871 after the wars of 1866 and 1870 in which he served valorously.

His explosive paroxysms appear as the psychic displays of a larvated or marked epilepsy. His insanity is evidently hereditary, not far removed from King Ludwig's mental aberration.

PANAMA'S WISE SANITARY EXPENDITURE.—Colonels Gorgas and Carter of the Medical Staff of the U. S. A., are doing and have done the greatest work for the welfare of the Canal zone and the world of our day and generation to the sanitary safety, happiness and prosperity for the Isthmus.

The *Globe-Democrat* of this city notes that "the United States has spent in the Panama zone, Panama and Colon \$5,700,000. for municipal improvements, chiefly for sanitation and truly comments that in a big enterprise good health is a paying investment, and Americans know how to spend money for it successfully."

If sanitation were foremost considerations in all other affairs of life, municipal and school management, especially, all humanity would be happier and better.

When it shall come to all in authority, medical and non-medical, and to all lay officials, that wise physicians "skilled our wounds to heal" are "more than armies to the public weal" and the best adjunct to armies and commonwealths a medical sanitary bureau with a medical head in the President's Cabinet, will be the "devoutly to be wished consummation" of the present right sanitary advice.

HAPLESS YOUTHS AND USELESS MEN, is the timely theme of Dr. Wm. Lee Howard in the November *American Magazine*, wherein he justly assails the curriculum of the American High School "as not one for a democratic country, giving a certain privileged number of youth—a very small number—a preparation for college entrance" and asks "how about the boy who is to start in business, trade or industrial occupation. Does he get a four year course preparatory to his work?"

The story of educational misfit in our American school boy training might fill a big book. The book educational course needs amending with more manual work for pupils and more oral effort and manual example in certain directions on the part of teachers. The classic language course should be shortened and taught more by natural method as modern languages are and in briefer courses. Life is too short, and art too long and vital endurance too limited for the old scholastic methods transmitted down from the monastery school and the pedagogies of the past.

THE TUBERCULOSIS CONGRESS has come and gone, but its impress to quicken popular concern for the extinguishment of this devastating almost omnipresent disease remains

and it is hoped will continue to impress and more forcefully than has ever before been impressed the great lesson of warning and extinction concerning this insidious plague of our civilization.

Considering the medical knowledge already given the world as to the perils, ravages and restrictive remedies concerning this destructive malady too little resistance has been made to its advances. The hygienic fighting of the people against it has been too apathetic, unvigorous and uneffective.

The story of its all pervading destructiveness and fatality has long been told. The people allow it to breed and spread as they do the neuropathic diathesis and the insane temperament. Yet these are the two most portentous perils that menace us with our feeble fighting effort to resist their conquering march and the school room has not yet heard their danger proclaimed to every child.

PUBLIC HEALTH AND HOSPITAL EXHIBIT at Seattle in 1909.—One of the chief benefits of a great exposition such as this will be in the educating of the masses on sanitary subjects. The progress of medicine and medical science, the great discoveries of the men who devote their lives to research and investigation, the value to the human race of the proper observances of the laws of sanitary science and hygiene are all matters in which the public are vitally interested and are willing to be informed when the opportunity presents itself, will be shown there.

The United States government proposes to illustrate the value of sanitary laws and practical hygiene at the Alaska-Yukon-Pacific Exposition at Seattle next year.

NOTICE OF CHANGE OF ADDRESS.—The business and editorial rooms of the *Alienist and Neurologist*, formerly located at 3872 Washington Boulevard, have been removed to 3858 West Pine St., St. Louis, where all communications should in the future be addressed.

MEDICAL AND SURGICAL FEATURES OF THE COMING EXPOSITION.—The exhibit at Alaska is to have a surgical section,

a laboratory section, a hospital section, a tuberculosis exhibit, a quarantine section and an X-ray section.

THE THIRTIETH YEAR OF THE ALIENIST AND NEUROLOGIST begins with the next number.

It has carried out its original purpose to the satisfaction of a great host of patrons of bringing Psychiatry, Neuroiatry, Psychology and Neurology within the realm of general medicine until its initial prediction that psychiatry and neurology were destined to reign paramount in general medical thought, is approaching fulfillment, and even surgery is beginning to acknowledge that the care of the organism through its paramount nervous system, is a therapeutic aim more to be regarded than the fear of microbic infection.

If you want light to continue to shine in your minds and on you, subscribe now for 1909. Five dollars per year.

3858 West Pine St., St. Louis.

NOW IT IS FUROR TRANSITORIUS of the twin variety and the prognosis is said to have been made by a Cornell school clinic physician called an "alienist," that the Haines brothers had furor transitorius, and a time is designated when Captain Haines can testify. There is such an exceptional state of brain and mind in the domain of alienism as mania transitoria caused by a pre-existing disease of the brain like epilepsia and the furor uterinus of nympho maniac women and there is also a transitory furor that is the common brain storm of voluntarily unrestrained passion, and there is a "folie in double forme," but double furor transitoria morbi is not a matter of record. Yet in clinical psycho pathology, transitory homicide furor to merit the extenuation of insanity should have a well-defined brain disease basis. The study of mania transitoria is one of the most difficult and requires the most thorough diagnostic discrimination between that and violent passion of any subject in psychiatry, which no man without thorough clinical experience, observaton and training in psychodiagnosis should have the temerity to attempt.

A diseased brain and morbidly influenced mind, even though they kill, should be held guiltless and saved from the

murderous punishment, but the man who kills his fellow even for provocation and in furor transitorius should not go free to kill again in a similar passion. Neither should the transitory maniac, for his paroxysm will come on again, while the disease persists.

THE MEDICAL FORTNIGHTLY, among other matters of merit gracing its pages, deserves the thanks of the medical profession for taking up and fairly presenting the case of the Barnes' Medical College as shown by the decision of the Court.

This is more than the *Journal of the A. M. A.* has done, though the subject is one that concerns the whole medical college interests of the United States.

To embarrass this school and wrong its graduates still further this Board after a second visit to the college and compelled to pronounce it properly equipped, still intimates that it will appear and will not examine those waiting graduates until after an appeal decision, which the Board knows must sustain Judge Muench's court.

This course appears on its face, to be for a purpose. There is a place for the gentlemen of this Board, but that place is not in a position that holds the honor of American medical colleges in its hands or the welfare of the American medical profession.

THE PHIPPS PSYCHIATRIC CLINIC NOT THE FIRST.—Henry Phipps, of Pittsburg, has given funds to the Johns Hopkins Medical School to found a psychiatric clinic in connection with the University Hospital. Dr. Adolph Meyer has been appointed director of the clinic. It will be a great addition to the teaching resources of the University and should produce many results from original investigations. Many medical journals have announced this as a new departure in America, and for their information we beg to state that for two years the University of Michigan has had in operation a large, separate psychopathic ward in connection with the University Hospital, beautifully equipped with laboratory and other facilities. Moreover, this ward is organically connected with

the four great insane asylums of the state and possesses a great advantage in being thus able to draw from an immense amount of clinical material.

It should perhaps be mentioned also, that probably the first psychopathic ward in the United States in connection with a general hospital was at the Albany General Hospital. This, however, is by no means organized like that at Ann Arbor.

More than twenty years have passed since the editor of the *Alienist and Neurologist* gave lectures on psychotherapy in the St. Louis Insane Asylum and more than thirty since he delivered clinical lectures on the same subject before the class in the amphitheatre.

ENLIGHTENMENT OF THE PUBLIC IN MEDICAL MATTERS.—The *Journal A. M. A.* notes that in his presidential address, Dr. H. L. Burrell, of Boston, calls attention chiefly to what he considers a duty of the medical profession at the present day, viz., that of judiciously educating the public in the present position of medical knowledge and in the advances that are being made in scientific medicine. Heretofore the profession has been properly conservative, but now a judicious publicity is advisable.

We think the medical profession has been improperly conservative on this subject, allowing the advertising quacks to do most of the talking, often misleading the public.

The public generally gets its medical knowledge after many decades and is now holding on to some of the medical fallacies formulated in the dark ages.

CORRESPONDENCE.

WE ACKNOWLEDGE with much pleasure receipt of the following with accompanying report of the Pathologic Department of the Central Indiana Hospital for the Insane and a printed list of lectures to be given by this department to the profession:

"DEAR DOCTOR:—If the policies and work outlined herein meet with your approval, please indicate the same by letter, addressed to me.

"Do you wish your name entered on the permanent mailing list of this department?

"We are aware of the many deficiencies existing in our system, but offer no apologies. We promise, however, to use our best endeavor to bring the medical service of the hospital and the work of the pathological department to a high state of efficiency.

"We know that those who are at all conversant with the facts, recognize the many serious obstacles to be overcome in inaugurating and prosecuting this character of work in public institutions.

"Thanking you in advance for the courtesy of your letter and assuring you of my appreciation, I remain,

Sincerely yours,

GEORGE F. EDENHARTER, M. D.,
Superintendent."

AN INSANE HOSPITAL COURSE OF LECTURES IN MENTAL PATHOLOGY.—Special clinics provided in the Central Indiana Hospital for the Insane will in 1908-1909 be in charge of Professor E. H. Lindley of Indiana University.

These clinics are designated to demonstrate those phenomena of insanity which are especially instructive to students of psychology and include the following:

1. The form of insanity:

Melancholia, mania, dementia, idiocy, imbecility, dementia praecox, impulsive and compulsive insanity; paranoia, paralytic dementia, and senile dementia.

2. Psycho-pathology:

a. Disturbances of perception (illusions, pseudo-hallucinations and hallucinations).

b. Disturbances of mental elaboration (amnesia, paramnesia, loss of orientation, malformation of ideas and concepts, disturbances of judgment and reasoning, disturbances of self-consciousness, retardation and flight of ideas, etc.).

c. Disturbances of the emotions (anhedonia, delusions, sporadic and systematized).

d. Disturbances of volition and action (impulsive and compulsive ideas, echo-praxis, negativism, stereotypism, abulia, etc.).

Cases illustrative of the above will be presented to the classes.

Members of the hospital staff will alternate in arranging cases for all the clinical lectures.

The lectures commenced September 29, 1908, and will continue each Tuesday.

Due notice of autopsies will be given the class by telephone to college.

Certificates of attendance will be issued by the college for these lectures.

These lectures are free to practitioners and students of medicine. Others will be admitted upon special permission by the Superintendent or Lecturer.

Dr. Edenharter sends the following invitation to the physicians.

DEAR DOCTOR:—You are cordially invited to attend any or all of these lectures.

Sincerely,

GEORGE F. EDENHARTER, M. D.,

Superintendent.

SELECTIONS.

CLINICAL NEUROLOGY.

PELLAGRA IN AMERICA.—*The Journal A. M. A.* calls attention to the epidemic prevalence of pellagra in the southern states, brings before the physicians of the United States, and notably those of the south, a number of problems the solution of which will well repay investigation. Despite the extensive use of maize in this country, pellagra has been so rare that till recently it has received little notice from American physicians. It has long been prevalent in European countries, especially in Roumania and Italy, and the literature on the subject is large, the list of titles referring to this disease in the Index-Catalogue of the Surgeon-General's Library occupying eight or nine pages. In a monograph by C. H. Lavinder, of the U. S. Public Health and Marine-Hospital Service, something may be learned of the importance of pellagra in Europe. In Roumania 50,000 individuals are afflicted with this disease, and in Italy about 100,000. Lavinder discusses the peculiarities observed in the American cases. The appearance of the disease in epidemic form indicates that some marked change must have occurred in a part of the maize crop, for such epidemics have not been noticed in former years. The relatively acute form and the high mortality distinguish the American from the European cases. This has led to some doubt as to the diagnosis, but we must expect variations in the symptomatology of such a disease. If present views of the cause are correct the poison must vary in quantity and possibly in virulence according to the number and kind of fungi which produce the poisonous products. The causes of this variation in virulence merit careful investigation. In general, the cause of pellagra is recognized to be the use of maize of poor quality. The particular change that brings

about the deterioration in quality is supposed to be the result of corn. These fungi probably vary in different seasons and localities. This difference may account for the sudden appearance of the cases in the United States and for the greater acuteness and virulence. Another important point to be decided is whether the poison is formed during the growth of the corn or develops after the grain is stored or even after it is in the intestinal canal. The extensive use of maize in the northern states suggests the possibility of obscure forms of disease arising from a milder form of intoxication from such low-grade grain. Careful inspection of maize intended for human food would appear to be a proper prophylactic measure.

MENDEL'S REFLEX.—*The Hospital* says: In the early stages of an organic nervous disease the Babinski sign has been found of the greatest possible service in assisting to exclude functional diseases. Mendel's reflex, which was made known to the profession some three or four years ago, is not so well known. It has been specially studied by Dr. O. B. Meyer, and he finds it of even greater value than the Babinski sign, inasmuch as he has been able to evoke it when the Babinski sign is negative. Mendel's reflex is elicited by placing the foot with its inner surface on a firm basis and percussing the dorsal tendons. In normal individuals percussion causes a dorsal flexion of the second to the fifth toes, but with certain organic changes of the nervous system percussion results in a plantar flexion. Dr. Meyer finds that dorsal flexion obtains in all cases of functional affections and in tabes dorsalis, but in other organic affections the plantar reflex results. He has met with ten cases recently in which the Babinski sign was negative but Mendel's reflex was plantar. In one case of complete paraplegia of all four limbs, all the signs and symptoms pointed to a hysterical condition; Mendel's sign alone pointed to an organic lesion. The case was subsequently shown to be one of encephalitis pontis.

BLOOD PRESSURE IN ARTERIOSCLEROSIS.—Rudolf (*Am. Jour. of the Med. Scs.*, Sept., 1908), says in many cases of

even well-marked arteriosclerosis the blood pressure is not raised. This may be because the disease is localized to a part of the arterial tree, or because the heart may at last be giving up the struggle and hence the pressure, once high, has now fallen. In many cases of arteriosclerosis, in which the pressure is found to be raised, it cannot be assumed that the pressure is high because of the disease of the vessel walls, nor yet that the sclerosis is due to the increased pressure. For example, the arterial stiffening may be due to syphilis, and the hyperpyresis to some intercurrent condition of nervous or toxic nature which may be more or less removable by appropriate treatment.—*Medical Fortnightly*.

THE NERVOUS SYSTEM AND TUBERCULIN REACTION.—In a recent article by Moro, noted by *Journal A. M. A.* Working in Pfaundler's clinic in Munich with the so-called percutaneous tuberculin reaction (rubbing in tuberculin-lanolin), Moro obtained results which indicate the probable participation of the autonomic or sympathetic nervous system in the reactions. Thus in several children the ointment yielded a reaction not only at the site of application, but also in a contralateral skin area situated exactly symmetrically to the spot inoculated. Again, in other children, besides the reaction at the spot anointed, scattered areas of reaction appeared in the skin at points widely separated from the inoculation site. If, for example, the tuberculin-lanolin preparation was rubbed into the skin of the abdomen, typical efflorescence appeared next day not only there but on the chest, back and neck, that is to say, in regions with which no tuberculin had been in contact. Still further, inunction was occasionally followed by a unilateral, girdle-like zone of reaction extending from the spot of application backward to the vertebral column and forward to the ventral median line.

It seems obvious that these reactions at a distance can not be due to a direct toxic effect of the tuberculin on the tissues in which the reactions occur but depend on nervous influences in which the spinal cord participates, though the main role must be ascribed to the sympathetic system.

From these observations, and others on which we can not here dwell, Moro has come to the conclusion that the percutaneous tuberculin reaction is essentially a vasomotor phenomenon due to strong excitation of vasodilator paths. He looks on the reaction as an angio-neurotic inflammation—a kind of “late reflex” in the sense of Kreibich.

If this view be correct it will be hard to avoid the inference that in people infected with tuberculosis there exists a specific irritability of the nervous system toward tuberculin, in other words, a specific nervous “allergy.” Moro’s results are most interesting and will doubtless stimulate further research along similar lines.

FRONTAL LOBES TUMOR WITH SYMPTOMS OF PARESIS.—F. X. Dercum, M. D. (*Journal of Nervous and Mental Disease*, July, 1908,) reports the following case: The autopsy showed an enormous tumor of both frontal lobes, dense, firm, and separating the frontal lobes widely and involving them both, though but feebly adherent to surrounding brain tissue; size, $2\frac{3}{4} \times 2\frac{3}{8} \times 1\frac{3}{4}$ inches. Microscopic examination proved it to be a sarcoma. The clinical history is interesting. Three months before the patient had suffered from impairment of vision, and later from headache, more marked on the right side, but no vomiting or nausea.

Friends noticed a change in his disposition, characterized by appearing “easily pleased” and “taking everything as a joke.” He became careless in regard to his business, and did various erratic things, and his moral character changed. He worried over his business. His gait was normal, but he had a tremor of his tongue; no change in reflexes or sensation. Examination of his eyes showed an optic atrophy secondary to a neuritis. Of the special senses, only smell was lost. He later developed gestures of an epileptic nature, and after a few weeks died.—*Noyes' Excerpt, Review of Reviews.*

NEUROPATHOLOGY.

VASO-MOTOR ALBUMINURIAS.—Under caption of Harmless Albuminurias, Williams (*Clinical Journal*, London,)

says albuminuria may be due to a great variety of causes, both physiologic and pathologic, of which structural disease in the kidney, forms but a small, if highly important, minority. The majority of the cases are either due to altered blood states, or to failure in the normal vasomotor mechanism. This failure may manifest itself in one of two directions. In the first, chiefly by some means so far undiscovered, the blood pressure in the splanchnic area rises, and is maintained at a sufficiently high level to induce a renal plethora and consequent albuminuria. Of such are the cases of hyperemia as in the instance quoted. In the second place, owing to a local or general vasodilation, the blood pressure in the splanchnic area falls to the point at which a renal stasis is induced. Of such are the cases of cyclical, postural and athletic albuminuria of which also instances are cited, cases which for the most part occur in young adults, in whom the vasomotor response is either undeveloped, or for some reason is inadequate. The author emphasizes that albuminuria of itself not only affords no evidence of renal disease, but does not even present a reasonable suspicion of the existence of such disease any more than dyspnea presents a reasonable suspicion of cardiac disease.

This is one of the best papers presented to this important Congress.—ED.

CHANNELS OF ENTRANCE OF TUBERCULOSIS by Dr. Samuel Bernheim, of Paris, President de "l'Oeuvre de la Tuberculose Humaine." Washington International Congress of Tuberculosis, September-October, 1908.

Doctor Bernheim quotes a great number of clinical facts and experiments on animals from which he concludes, contrary to the opinion of Professor Calmette, that tuberculosis is chiefly transmitted by aerial germs and by way of the respiratory tract.

18.—The clinical data furnished by pathological anatomy and by experiments since half a century, far from shaking the "aerogenic" doctrine of human tuberculosis confirm, on the contrary, this etiological conception, which sees in the re-

spiratory tract a principal and usual point of entrance of the bacterial contagion.

2°.—A great number of cases of tuberculous contagion by the dry bacilli of Koch incorporated in dry dust and numerous other objects, prove the virulence of this microbe even when it is not carried by a moist vehicle. The great facility of realizing in man as well as in animals an experimental tuberculosis by inhalation, argues in favor of the view that the respiratory path is a common channel of infection.

3°.—The intestine as a door of entrance is possible, but it is far from being the normal and usual one. The frequency of human tuberculosis in the countries where the use of milk and meat is very limited, the slight mortality of children by tuberculosis during the period of lactation, demonstrate that their intestines play a role altogether secondary, although appreciable, as a channel of entrance of tuberculosis. Moreover, the necessity of large doses of tuberculous products to produce an experimental tuberculosis and the numerous failures in obtaining it, do not argue in favor of the "enterogenic" doctrine of human tuberculosis.

4°.—The bacillary heredity of tuberculosis does not exist, exceptionally it may result from the hereditary contagion "in utero" and cannot be considered as an important factor in the contagion of tuberculosis.

5°.—The hereditary predisposition must be rejected, for infection in this way is in relation with the degree of "contagiosity" of the environment which produces phthisis, and with the frequency of contaminations.

6°.—The vascular path is rare as a channel of entrance of Koch's bacillus and it is very difficult to demonstrate its importance.

7°.—The genital tract must be considered as a factor of some importance in the propagation of tuberculosis. The clinical observations and experiments demonstrate that this channel of entrance is far from being as rare as has been supposed.

8°.—The anal orifice may serve as a channel of entrance to tubercular bacillus in the same conditions as the mucous membranes or the skin. The results concerning that mode of

contamination are very numerous; we must then attribute an important etiological role to this region of the human body. The skin may serve as a channel of entrance to tuberculosis, in conditions particularly favorable to "contamination" (infective traumatism) nevertheless it could not be considered as a factor of first importance in the propagation of tuberculosis.

9°.—The buccal mucous membrane in the children must be considered as a possible door of entrance for cervical tuberculosis (ganglionic.)

CEREBELLAR TUMOR.—Three cases of cerebellar tumor are reported by W. Sinkler, Philadelphia (*Journal A. M. A.*, September 26). Two patients were operated on, one of them twice; the other died suddenly while waiting for operation. In one of the patients operated on no tumor was found at the time, but growths were found in both cerebellar hemispheres at the autopsy, thirteen days later. In the patient operated on twice the result was a brilliant surgical success, the symptoms were generally relieved, and the patient was apparently in perfect bodily health seven months after the operation, but the vision continued to fail. Sinkler says these two cases show that to save vision, early operation is essential. In the case of sudden death the tumor was one that was capable of being rapidly removed, and he thinks that if the operation had not been delayed the patient might have been saved—another indication of the importance of early operating.—*Amer. Pract. and News.*

REMOTE CAUSE OF DEMENTIA PRECOX.—The most serious affections which fill our hospitals for the insane are due to those difficulties of *instinctive and emotional adaptation* which form both theoretically and numerically the most important types of psycho-biological problems. We may admit that approximately 10 per cent of the admissions to hospitals for the insane suffer from general paralysis or paresis, and about 20 per cent from alcoholic psychosis, that is to say, from disorders with a plainly bacterial or toxic non-mental factor as the exciting link—to be sure also based primarily upon a

deviation of instincts, but rather upon an excess of what is considered sane enough to be tolerated as a mere social evil, namely, alcoholism and irresponsible sexual relations entailing risk of venereal infection. But at least 30 per cent of the admissions seem to make up a group of disorders of the more *personal* instinctive adjustments involving a miscarriage of instincts through lack of balance,—*dementia precox*.—*Dr. Adolph Meyer, in Psychological Clinic.*

NEUROPHYSIOLOGY.

SAJOUS ON THE PITUITARY BODY* is one of those unfortunate structures which histologists and physiologists relegate to the waste basket as "vestigial organs" when they can not explain its functions. It is fortunate, in fact, that it is located below the brain, beyond the reach of surgeons, for there would have been a holocaust of pituitary bodies just as there has been a holocaust of appendices, ovaries, etc., unless resort to surgery had been checked by the appalling results of such a procedure. Indeed, when this organ is completely removed in adult animals, formidable symptoms ensue, the temperature and the blood pressure recede; nutrition is inhibited, as shown by rapid emaciation, the intense weakness and the lowered metabolism. Dyspnea, muscular co-ordination, interpreted by convulsions, follow, and, usually on the third day the animal lapses into coma and dies. Conversely we find the pituitary causing opposite phenomena when it is the seat of hyperemia, hypertrophy, or tumors which render it over-active. In the early stage of acromegaly, for instance, the general nutrition and muscular power are greatly increased. The over-nutrition is such, in young subjects, that their stature often reaches that of giants.

The importance of the pituitary to life is further emphasized by the fact that the morbid symptoms and death caused by its removal do not follow removal of the brain. As shown by the Cornell frog, Goltz's dog, and other examples, all the

*Abstracted from paper read by invitation before the Amer. Therap. Soc. and Phila. branch of Amer. Pharm. Ass'n, May 7, 1908.

functions other than intelligence, are, after recovery, as perfectly performed as if the cerebral hemispheres were still present.

How does the pituitary so prominently influence the temperature, the blood pressure, metabolism, and nutrition, all functions which affect the entire organism?

Is it through the intermediary of a secretion as generally believed? Not a single proof is available in literature to show that the pituitary body secretes anything. There is ample evidence, however, contributed by such men as Cajal, Andriezen, Gentes, and others, to show that the pituitary is connected by nerves with the base of the brain. My researches showed, moreover, that these nerves were the beginning of a nerve path, which, passing by way of the bulb, the spinal cord, the upper sympathetic ganglia, and the splanchnic terminated in the adrenals. Not only did excitation or division of this path at intervals produce the identical phenomena observed after removal, excitation, or disease of the pituitary body, but the same procedures applied to the adrenals also provoked the same phenomena. Briefly, I found that the pituitary body and the adrenals were united by nerves and that it was through the adrenals that the pituitary produced the various phenomena credited to it.

It becomes a question now as to how the *adrenals* awaken these remarkable effects.

Physiologists had been unable to discover the identity or source of an "internal secretion" shown by Bohr and other physiologists to be necessary to explain pulmonary respiration, in so far as the taking up of oxygen from the air was concerned. They had admittedly also failed to find the origin of 96 per cent of the substance which distributes oxygen to all the tissues, the hemoglobin. My investigations showed that it was the secretion of the adrenals which fulfilled both these functions. Being secreted into veins which open into the inferior vena cava, it inevitably reached the lungs; being a powerful reducing agent, it necessarily absorbed oxygen on being exposed to the air of the air cells. Moreover, the previously unidentified albuminous component of hemoglobin gave all the reactions of the adrenal secretion. A striking con-

firmation of the latter fact was recently contributed by Professor Mulon, of Paris, who found that the red corpuscles gave all the reactions of adrenalin.

The manner in which the adrenals awaken the various phenomena previously enumerated may now be accounted for. As their secretion is the substance which supplies oxygen to all tissues, their removal causes a lowering of the temperature and of the blood pressure, arrest of nutrition, emaciation, great muscular weakness and death—precisely the symptoms that follow removal of the pituitary body, the seat of their center. Conversely, it explains how adrenal extract or adrenalin raises the temperature and the blood-pressure, *i. e.*, by enhancing oxygenation and metabolism in all tissues. The remarkable influence of the adrenals on life—in keeping with that of the pituitary body—is not only shown by the fatal effects of their removal, but also by the direct action of their products in sustaining life. As is well known, Crile, by means of injections of adrenalin in saline solution, was able to resuscitate animals fifteen minutes after all signs of life had ceased, and to keep a decapitated dog alive ten hours.

On the whole, the pituitary body through its connection with the adrenals governs the pulmonary and tissue respiration; that is to say, the life process itself.

The pituitary body regulates the functions of another set of organs, the thyroid gland and its glandules, the parathyroids. The nerves from the pituitary to these organs were discovered by de Cyon, a Swiss physiologist, who pointed out that they caused dilation of the thyroidal vessels, increasing, thereby, the functional activity of these organs.

NEUROTHERAPY.

THE FREQUENT USE OF CALOMEL as an internal remedy lends a particular interest to the question of its manner and place of absorption. M. Nemzere (*Roussky Vrach*), at the Institute of Experimental Medicine of St. Petersburg, has undertaken researches into this question. His experiments were conducted upon dogs which had been subjected to artificial fistulæ at various points of the gastro-intestinal tract.

The author finds that during its stay in the digestive tube the calomel undergoes a process of solution, solubility, however, varying in different places. In the stomach little or none is absorbed, despite the presence of free hydrochloric acid; solubility increases much in the neighborhood of the duodenum where the reaction is still acid, and reaches its maximum in the small intestine. Mercury, which reaches the large intestine in solution, is there partly absorbed, the other part being precipitated by the sulphuretted hydrogen. Bile and gastric juice have absolutely no action upon the mercury, which is only acted upon by the succus entericus and, more especially, by the pancreatic juice. The alkaline reaction of the intestinal content does not prevent the process of absorption of calomel, which starts in the small intestine and stops, according to all appearances, in the upper segments of the large bowel. A fairly large portion of the mercury absorbed is stored for a relatively long time in the liver, the kidneys, and the thickness of the walls of the large intestine—that is to say, precisely in those organs upon which calomel exerts a selective action in stimulating their functions. Other viscera retain but little calomel, and behave indifferently with regard to it.—*The Hospital*.

TREATMENT OF TETANUS.—Following are the conclusions of Dr. J. W. Struther's paper on this subject in September, 1908 number of the *Edinburgh Medical and Surgical Journal*.

For each period of five years in Paris from 1886 to 1905 the deaths numbered 135, 128, 176 and 153 respectively. The absence of any decided fall in the death-rate is certainly suggestive of the uselessness of antitoxin.

It is, however, obvious from the nature and rare incidence of tetanus that dogmatic statements as to the value of this or that treatment must in the present state of our knowledge be accepted with caution. To anyone seeking for guidance in the treatment of the disease the lessons to be learned from the discussions seem to be:—

1. The curative value of tetanus antitoxin in man is either *nil* or so slight that it is not to be relied on. The older

plan of giving very large doses of sedatives, especially chloral, is as likely to be successful as anything.

2. A number of surgeons of large hospital experience are in favor of prophylactic injection of antitoxin in cases where infection with tetanus bacilli may be suspected.

3. To be effective the antitoxin must be injected at the earliest possible moment, and the injection should be repeated weekly till healing of the suspected wound takes place, or at any rate for several weeks.

4. The initial dose should be from 10 to 30 c. c. of the Pasteur Institute serum, or an equivalent quantity of Behring's, Tizzoni's or other serum. For superficial, easily-cleaned wounds the smaller dose is enough; for large, deep or very dirty wounds the larger dose should be used. The repeat dose may be 10 c. c.

The doctor's references are:

Suter. *Beitrage z. klin. Chirurg.* Bd. 52. S. 671.

Brandenstein. *Deutsch. Zeitschr. f. Chirurg.* Bd. 92.

Dehne u. Hamburger. *Wien. klin. Wochenschr.* Hft. 1-3. 1907.

Verhandl. d. Deutsch. Gesellschaft f. Chirurgie. 1906.

Bull. et Mem. de la Soc. de Chirurg. 1907. Pp. 330, 380, &c.

Bull. de l'Acad. d. Med. 1908. Nos. 21, 22, 23, 25, 26.

VENESECTION IN HIGH BLOOD PRESSURE.—In cases of very young men with very high and obstinate blood pressures, I think that venesection has an indubitably good effect. I have had the most grateful letters from hyperaemic patients telling me that for years they had not felt so well as for some months after each time they had been bled.—*Professor Clifford Allbutt, in The Hospital.*

PSYCHIATRY.

PSYCHIC TREATMENT OF ALCOHOL AND DRUG NEUROSIS.

—The neurotic heredity and the inflammatory and toxic symptoms must receive first and constant attention, but the psychic disturbance may be even more prominent, and to

treat both, giving special attention to the one that is the most important in the individual case, is the highest practical science of to-day. When psychic treatment is employed, one question is whether sudden or gradual methods are best. If the patient is egotistical, with delusions as to his strength and capacity, it is well to use the most impressive means to shock and break up his actual range of thought. This should be followed by more continuous impressions till the mind has been trained out of its old morbid tendencies. In other cases it may be more advisable to use gradual methods from the first and the use of judiciously regulated mental and physical occupation, even up to the point of causing fatigue. Religious impressions, properly utilized, are also helpful, though Crothers thinks their effects are apt to be transient if not followed up by continuous appeals and increased organic vigor. Inebriates and drug fiends are very susceptible to contagion, and the paretic egotist who defends the use of liquor and urges other dangerous theories which are accepted by weaker minds, is a dangerous psychic degenerate, and should be isolated and made subject to strong impressions. Physical training, removal of toxic causes and improvement of nutrition afford a larger scope for mental treatment, and the toxic neurotic with his damaged brain centers, weakened resisting power and lowered vitality needs something more than mere physical treatment. He needs also psychic remedies to turn his feeble mentality into new lines of thought.—*Dr. T. D. Crothers, Hartford, before the A. M. A.*

MENTALLY, Mongolian idiots display all grades of deficiency, but most of them are simply imbecile. They are apathetic and easy to manage, being good tempered and easily amused. Some observers have described special aptitude for drill, dancing, and music. They are never erotic or vicious, contrasting markedly thus with most other feeble-minded children. They acquire the power of speech very late, and also that of walking and of movement generally. Muscular power is feeble, but sight and hearing are good. The knee-jerk is often absent, and the plantar reflex extensor. One of the most peculiar features of the disease is the absolute

uniformity of the type; owing to this a case can be recognized at once, and it is said that parents have great difficulty in picking out their own children on visiting days in institutions containing several of these patients. The pathology of the disease remains mysterious; no lesions have been constantly found otherwise than in the brain, though congenital morbus cordis and other defects are not rare. The ductless glands present no demonstrable abnormalities. In the brain are found thinning of the cortex and rarefaction of the nerve cells, especially the large pyramidal cells. The prognosis of all cases is very bad, mentally and physically. Lung diseases, chiefly pneumonia, bronchitis, and tuberculosis, carry off most of the children before they reach puberty. No drug treatment is known which has any effect at all. Thymus and thyroid medication have been tried, and, as might be expected from the post-mortem findings, have been proved to be without value. The prospect of improving the patient's mental condition by pedagogic methods is also not a particularly brilliant one.—*The Hospital*.

CLINICAL PSYCHIATRY.

IF THERE IS ONE THING more than another which may be said to characterize and at the same time foster the revival of interest in that branch of medicine which Winslow was pleased to call the "Obscure Diseases of the Mind," it is the individual biologic method of dealing with mental cases.

Time was when alienation was looked upon either as a crime or as a visitation from another world, which often amounted to the same thing, and its treatment was the dungeon, chains, even rack and stake. A relic of these not ancient days still persists in our current legal procedure. Men are still haled before juries of laymen, *charged* with the offense of having lost their wits, and required, if they can, to prove their innocence to this jury of laymen, i. e., to obtain from men who have no knowledge of the pathology of the mind the verdict that they are mentally sound. But the whole idea of mental unsoundness, responsibility and crime has been undergoing a profound change. This change has been marked

by a turning of the attention from object to subject, from the act to the person, from the effect to the cause.

The tendency toward a rational and prophylactic treatment of juvenile offenders, which has spread to include almost every State in the Union, is a proud exemplification of this change. Under the old regime the act of the youthful delinquent was a finished product known as a crime. The question was one of retribution, vengeance, an eye for an eye. The crime was punished, but it was the culprit who suffered. It was woe to him by whom offense cometh, without lessening by a jot the long run of offense.—*By Clarence B. Farrar, M. D. Sheppard and Enoch Pratt Hospital; Associate in Psychiatry, Johns Hopkins University; Visiting Physician, Bayview Asylum in Maryland Medical Journal.*

THE PREVENTION OF INSANITY. While we may be unable to modify hereditary influences through legislative or advisory control of marriage, we can carefully guide the growing mind of the offspring of such unfortunate marriage, and guard it against the evils of a faulty school system. The backward child can be properly classified. The physically weak child need not be crowded beyond his strength. The hygienic and sanitary condition of the schoolroom can be maintained at a proper standard. Medical inspection of the school and the pupils can be enforced. The dangers to the rapidly growing brain and mind during the critical period of puberty and adolescence can be minimized so that the mind of the child not favorably endowed by heredity need not be jeopardized. These are prophylactic measures that will receive constantly increasing recognition just as soon as popular understanding of their importance and their relation to the causation of insanity becomes more general.

Environment plays a prominent part in the etiology of insanity. Many individuals with an unfortunate heredity are able to withstand a mental breakdown by the counteracting beneficial effect of a good home, the surroundings of which are healthful and congenial. In this respect the poor in large cities are unfortunately situated.—*From Presidential Address before Medico-Psychological Association, Cincinnati, O., 1908, by Chas. P. Bancroft, M. D., Med. Supt. N. H. State Hospital.*

EUGENE COHN ON HEREDITARY PREDISPOSITIONS.—The enduring effects of hereditary laws should convince us that it is necessary that we should understand ourselves, our peculiarities and shortcomings; that we should also heed the lesson of the past; that we owe to every child the birthright of those inherited tendencies which make for strength and health of body and mind; and that proper knowledge should be given children in order that they may be prepared to meet the perplexities of life.

Church and pulpit, school and college, parent and physician, each should contribute a proper share toward the improvement of moral and social influences, and to the publicity and study of various social questions. Fearless and wise education is needful everywhere if the menaces to the general good are to be lessened in any perceptible degree.

Considering the immeasurable influence of heredity on interests of future generations, there is believed to be an urgent necessity for the enactment of legislation which will prevent the perpetuation by hereditary degenerates of their hopeless species. It is certain that the population subject to confinement in our penal and charitable institutions would be greatly diminished through the operation of careful and considerate measures.

REVIEWS, BOOK NOTICES, REPRINTS, ETC.

POST-MORTEM OF INSANE AT NORRISTOWN HOSPITAL.—Before us lies the Index of 1180 post-mortems of the insane of the State Hospital at Norristown, Pa., and a great and useful record of work it is for which alienist clinicians should be specially indebted.

This work from 1884 to 1908 was done by Dr. F. X. Dercum, Dr. Harriet E. Lothrop, Dr. Florence Hull Watson, Dr. Edith A. Barker and Dr. Henry J. Sommer, Jr., Pathologists. Dr. Ida V. Reel, and Dr. Mary Morey, Assistants and Dr. Allen J. Smith, Consulting Pathologist and its presentation in available form comes to us from the hand of Dr. H. J. Sommer, the present pathologist of this famous institution.

One of the interesting revelations of this remarkably painstaking and thorough work is the invariable implication of the liver in terminal and senile dementia, a subject we happen to be just now investigating, as well as in nearly all other forms of fatal cerebro-mental disease. It would seem from these and Allen Jackson's tables also before us, that in the fatal failure of vitality in most chronic insanity an impaired liver is a most frequent factor. Either that or interstitial nephritis or tuberculosis with it are the usual destructive allies. In other words these records show that the insane do not die altogether at the top.

PRESIDENTIAL ADDRESS: HOPEFUL AND DISCOURAGING ASPECTS OF THE PSYCHIATRIC OUTLOOK. By Charles P. Bancroft, M. D., Medical Superintendent N. H. State Hospital, Concord, N. H.

A good address from an instructive source of clinical experience. Reprinted from *American Journal of Insanity*.

PARAFFIN IN HERNIA. By Charles C. Miller, M. D.

This brochure with its case records in illustration will interest the surgeons among our many readers. It is published by The Oak Printing Company, 9 Wendell St., Chicago.

SCHOOL HYGIENE issued by the American School Hygiene Assn., is an important publication for all interested and who should not be in the sanitary welfare of our children?

School hygiene rightly understood and enforced means the ultimate safety of the race from disease and degeneracy of body and mind. It means saving mental and physical vigor for society and the nation.

THE BROADER AIMS OF THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE AMERICAN MEDICAL ASSOCIATION.

By Torald Sollmann, M. D., Cleveland, Ohio.

A brochure every doctor and pharmacist should read.

TUBERCULOSIS IN THE UNITED STATES. Bureau of the Census. S. N. D. North, Director. Prepared for the International Congress on Tuberculosis, Washington, September 21 to October 12, 1908, and sent out by the Department of Commerce and Labor.

A valuable showing for physicians and people and, at the same time a reflection on the apathy of the great medical profession relative to public affairs, that this subject is not handled by an officer of Public Health and a Department represented in the Cabinet of the President. This report shows death by tuberculosis to be 11.2 per cent of the nation's annual mortality in 1907.

EPILEPSY AND ITS TREATMENT. By William Francis Drewry, M. D., Petersburg, Virginia. Reprint from the *Charlotte Medical Journal*.

Alphamonobrom-Isovalerylurea. (Bromural). A New Nerve Sedative and Somnifacient. By William Henry Potter, M. D., Professor of Pathology and General Medicine at the New York Post-Graduate Medical School and Hospital; Attending Physician to the New York Post-Graduate Hospital, etc. From *Boston Medical and Surgical Journal*.

FOURTH ANNUAL REPORT OF THE HENRY PHIPPS INSTITUTE.

—For the Study, Treatment, and Prevention of tuberculosis, February 1, 1906, to February 1, 1907. An account of the General and Special Clinical and Pathological Work done by Members of the Staff at the Institute During the Year. Edited by Joseph Walsh, A. M., M. D. Published by the Henry Phipps Institute, Philadelphia, 1908.

This interesting report has an illustrated feature between pages 240 and 241 of localized tubercular leptomeningitis which will interest alienists and neurologists as well as general practitioners. In fact the entire neurological report and pathological findings are valuable to all physicians.

GENITO-URINARY DISEASES AND SYPHILIS. By Edgar G. Ballenger, M. D., Lecturer on Genito-Urinary Diseases, Syphilis and Urinalysis, Atlanta School of Medicine Editor *Journal-Record of Medicine*; Genito-Urinary Surgeon to Presbyterian Hospital, Atlanta, Ga. With 86 illustrations 276 pages.

This is a practical and concise little book that will give the student valuable information and inspire confidence. Price \$3.00, carrying charges prepaid. Its price, however, is a little above the average, but its contents are worth the price. E. W. Allen Co., Atlanta, Georgia, are the publishers.

A NEW DIETETIC AND INJECTION METHOD OF TREATING TYPHOID FEVER, with a Report of One Hundred and Thirty-Eight Consecutive Cases Successfully Treated in the Last Ten Years.

Under the above title Dr. F. J. W. Maguire, of Detroit, contributes an interesting article to the July (1908) issue of the *Michigan State Medical Society Journal*. He bases his conclusions upon experience gained in the United States Marine Hospital service and in private practice. Dr. Maguire makes a very satisfactory showing.

PARAFFINE IN HERNIA or The Cure of Rupture by Paraffine Injections, by Charles C. Miller, M. D., the author of *Cosmetic Surgery*, comprises a description of a method of treatment

destined in the opinion of the author to occupy an important place as a cure for rupture owing to the extreme simplicity of the technic and its advantages from an economic standpoint. In this brochure of eighty pages the author records ten of his first cases with subsequent satisfactory results. It is a book for practical surgeons.

CEREBRAL INHIBITION WITH RELATION TO MOTOR FUNCTION.

By H. A. Tomlinson, M. D., Superintendent of the St. Peter State Hospital, St. Peter, Minn. Reprinted from *The Journal of the American Medical Association*, July 18.

A paper of observation and thought worthy the perusal by alienist and neurologist and general physician.

A New Method of Diagnosis and Treatment of Fistulous Tracts, Tuberculous Sinuses and Abscess Cavities. By Emil G. Beck, M. D., Surgeon to the North Chicago Hospital. Chicago, Ill.

Sane Prototypes of Insane Mental Processes. By Dr. Theodore H. Kellogg, New York City. Reprinted from *The Journal of Abnormal Psychology*.

The Clinical Significance of Uterine Deviations. A Clinical Study of Three Thousand Recorded Cases. By Lucy Waite, B. A., M. D., Chicago, Ill. Reprinted from the Transactions of the XV. International Medical Congress held at Lisbon, April 19-26, 1906.

The X-Ray in Dermatology; Or Truth and Fallacy Concerning X-Ray Dermatitis. By Albert C. Geyser, M. D., New York City.

The Operation for Thrombus of the Sigmoid Sinus and Internal Jugular Vein, of Otitic Origin. Frank Allport, M. D., Chicago.

Experimental Observations into the Etiology and Treatment of Paresis. By John D. O'Brien, M. D., Pathologist and Assistant Physician, Massillon State Hospital, Massillon, O.

Further Studies in the Treatment of Tuberculous Sinuses, Fistulous Tracts and Abscess Cavities. By Emil G. Beck, M. D., Surgeon to the North Chicago Hospital, Chicago. Reprinted from the *Illinois Medical Journal*, July, 1908.

The Operation for Thrombus of the Sigmoid Sinus and Internal Jugular Vein, of Otitic Origin. By Frank Allport, M. D., Chicago. Reprinted from the *Journal of the American Medical Association*, April 25, 1908, Vol. 1, pp. 1331-1338.

The Submerged Tonsil with Special Reference to Cervical Adenitis and Systemic Infections. By Lee M. Hurd, M. D., New York City. Reprinted from *American Medicine*, New Series, Vol. III, No. 7, Pages 316-319, July, 1908.

The Diagnosis and Treatment of Rheumatism and Allied Affections. By Albert C. Geyser, M. D., New York. Reprinted from the *Journal of Advanced Therapeutics*, August, September and October, 1906.

Trichinosis of the Upper Respiratory Passages, with Report of Cases. By John Edmund Mackenty, M. D., New York City. Reprinted from *American Medicine*.

Treatment of Gastric Ulcer. By Theodorus Bailey, B. S., M. D., New York City. Reprinted from *American Medicine*, New Series, Vol. III, No. 3, Pages 125-130, March, 1908.

A Neglected Measure of Fatigue. By Frederic Lyman Wells, Ph. D. Reprinted from the *American Journal of Psychology*, July, 1908, Vol. XIX, pp. 345-358.

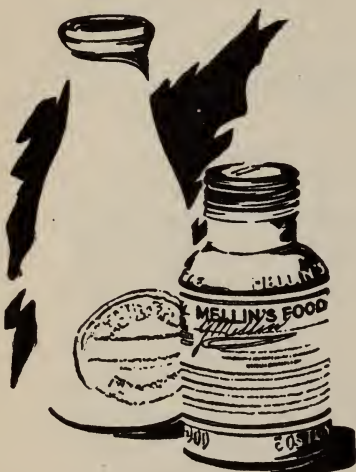
Third Biennial Report of the Parsons State Hospital for Epileptics, Parsons, Kansas.

PUBLISHER'S DEPARTMENT.

ECTHOL in blood poisoning and as an external remedy in all painful affections, especially rheumatic, is commended from personal clinical experience by G. A. Gorse, M. D. of Meadowbrook, N. Y.

RICORD AND THE MISER.—Dr. Ricord the great French syphilographer, met a miserly hypochondriac rich man on a Paris boulevard who sought gratuitous advice after the adroit manner of misers wishing to get something for nothing, saying, "I feel badly in my stomach, Doctor." Ricord placing fingers on pulse, asked the miser to put out his tongue and close his eyes. When the miser did so Ricord disappeared. A crowd soon gathered about the novel sight of a man silently standing in the street with eyes closed, mouth open and tongue protruded, who thought the miser crazy.

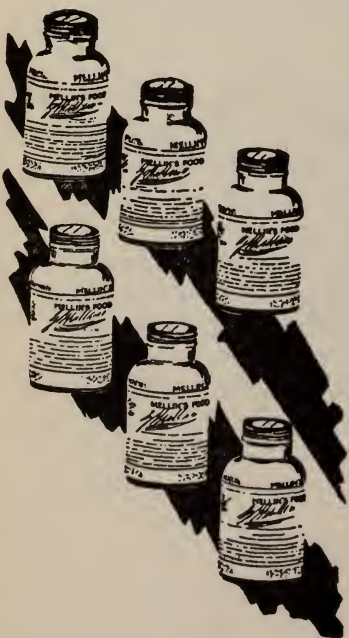
IN THE WASTING DISEASES, as well as in rickets, scrofula and marasmus, it is of the greatest importance that a remedy be selected which will quickly check the pathological condition, and restore the organism to the normal without producing digestive or other functional disturbances. Cod liver oil has always stood first in the category of remedies calculated to bring about this desirable result, but unfortunately its peculiar odor and taste are features which are quite often objectionable to patients. Hagee's cod. ext. ol. morrhuae comp. is an elegant preparation, containing all the essential therapeutic properties of cod liver oil combined with tissue building chemicals (hypophosphites of lime and soda) and aromatics, which render it agreeable to the palate.—*Am. Jour. Dermatology.*



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THE MISSISSIPPI VALLEY MEDICAL ASSOCIATION held its last meeting in Louisville, Ky., October 22, 1908, and the following officers were elected for the ensuing year:

Drs. J. A. Witherspoon, Nashville, Tenn., President; Louis Frank, Louisville, Ky., First Vice-President; Albert E. Sterne, Indianapolis, Ind., Second Vice-President; S. C. Stanton, Chicago, Ill., Treasurer, and Henry Enos Tuley, Louisville, Ky., Secretary.

The next annual meeting will be held in St. Louis, Mo., October, 1909.

EPILEPSY.—Since Brown-Sequard formulated his celebrated mixture of the bromides they have everywhere been regarded as the "sheet anchor" in the treatment of epilepsy, and whatever progress has been made has only been in the line of additions to these efficient remedies. Hammond ("Diseases of the Nervous System") says: "The treatment of epilepsy rests solely on experience. Among medical remedies the bromides stand pre-eminent and should be thoroughly tried in every case." He adds, "Herpin, several years ago, called attention to the salts of zinc, in the treatment of epilepsy. I have used the lactate and still more recently, the bromide with very definite beneficial results. (pp. 714-716.)

Lauder Bruton says of the bromide of potassium: "It is especially beneficial in epilepsy, and by its use the convulsions can almost always be lessened, if not entirely stopped." (Therapeutics, etc. p. 521.)

Allen McLane Hamilton says of the treatment of epilepsy: "No general remedies have been of so much service as the bromides, especially those of sodium, ammonium and potas-



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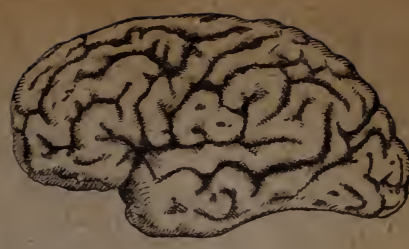
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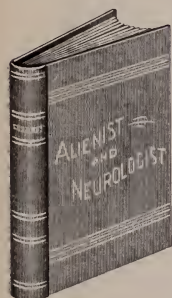
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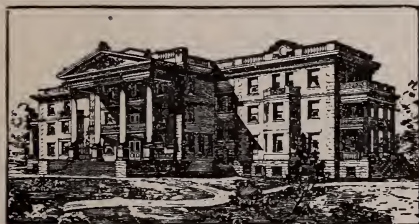
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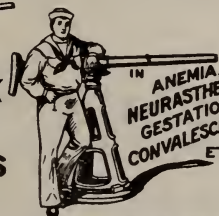
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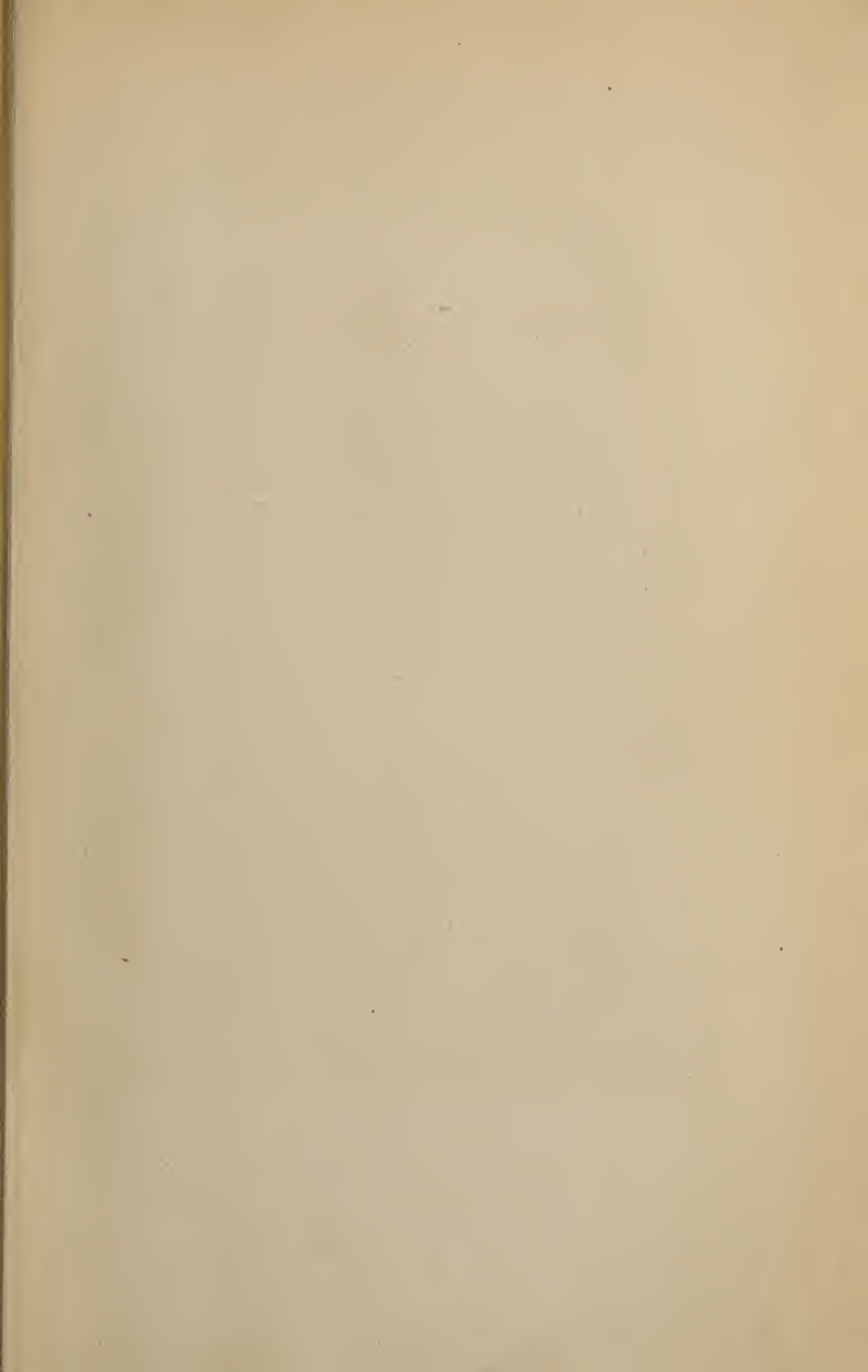


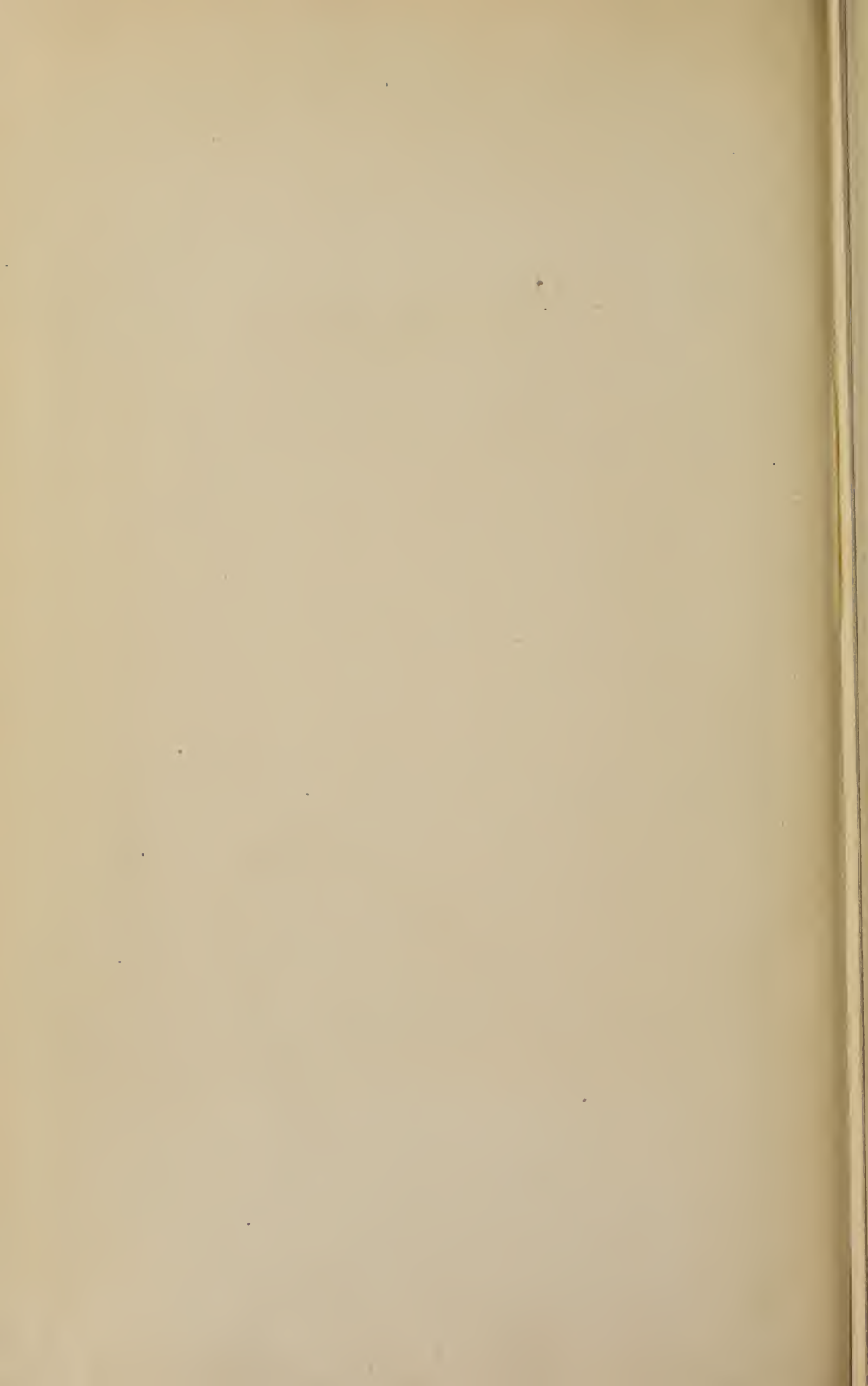
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